FIG. 1 PRIOR ART

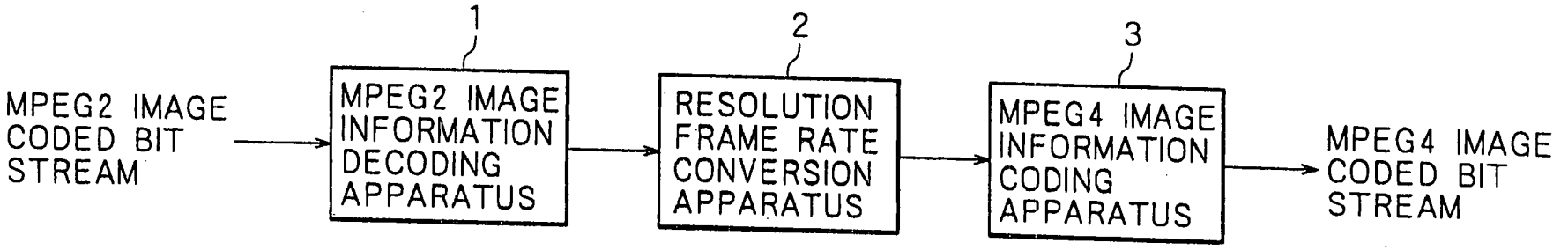


FIG. 2 PRIOR ART

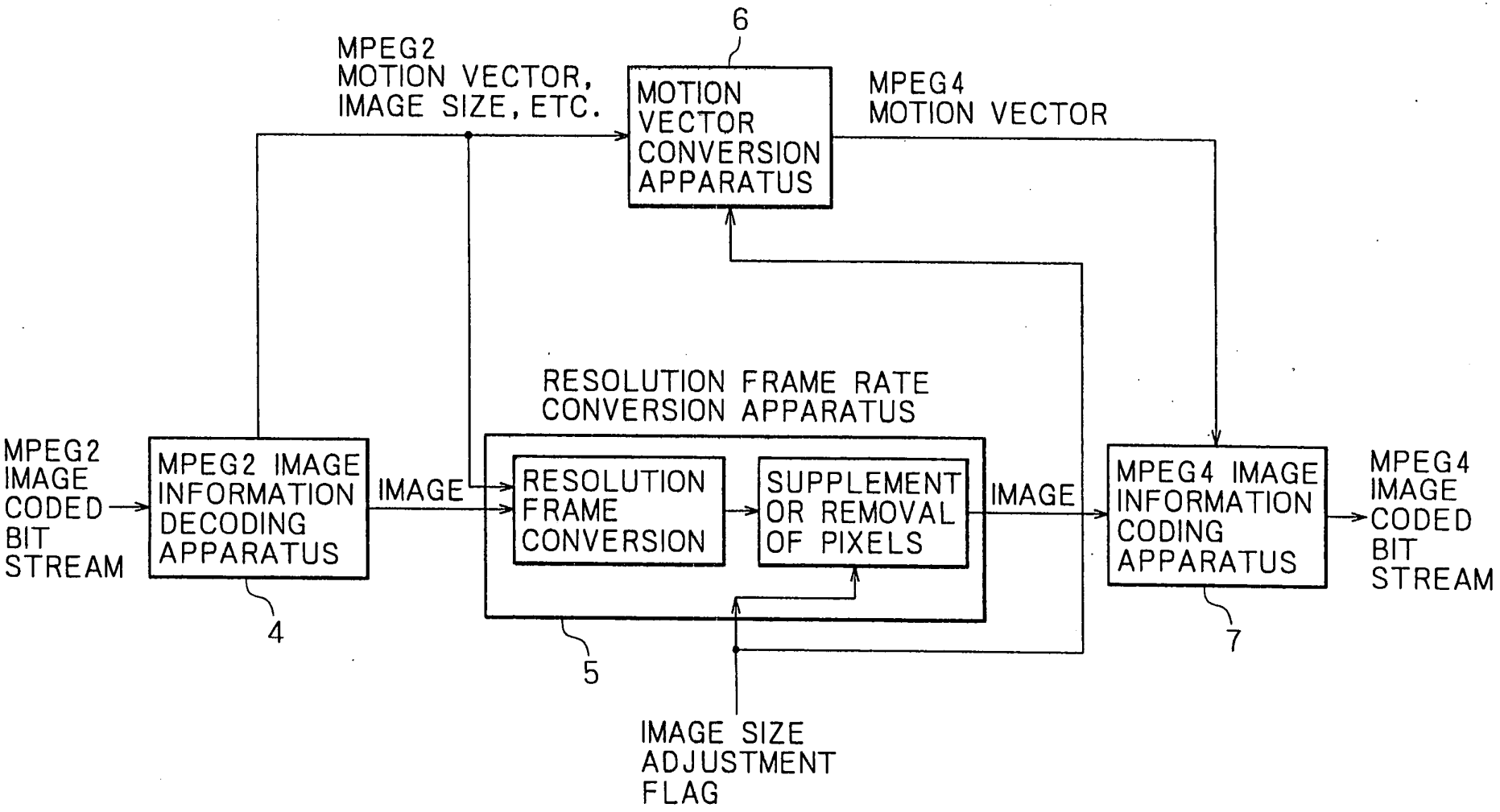


FIG. 3A PRIOR ART

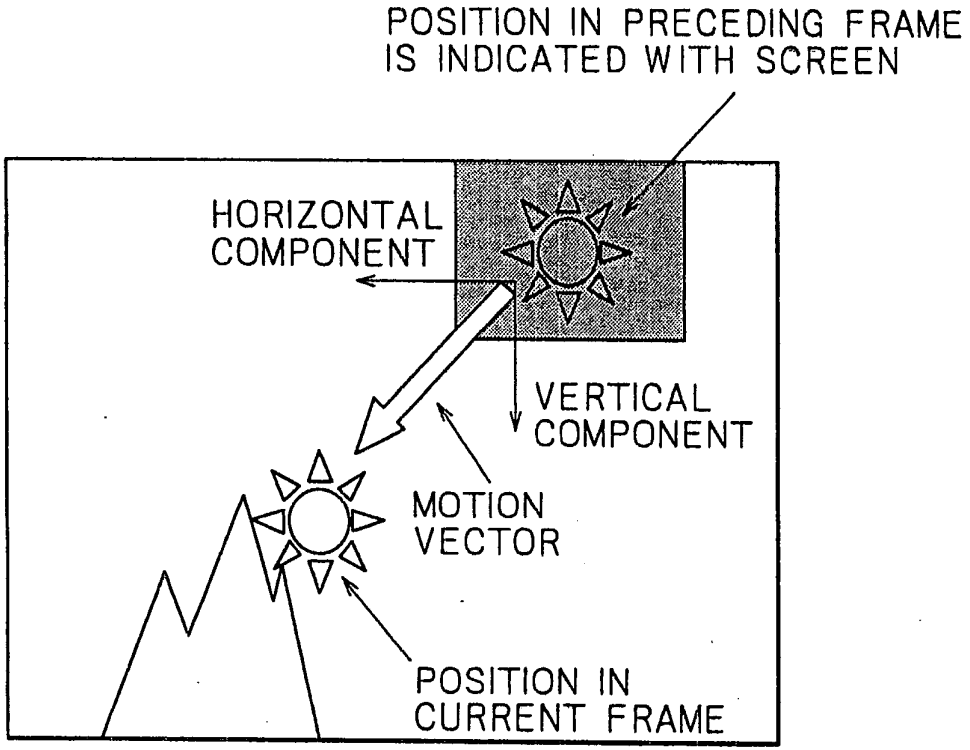


FIG. 3B PRIOR ART

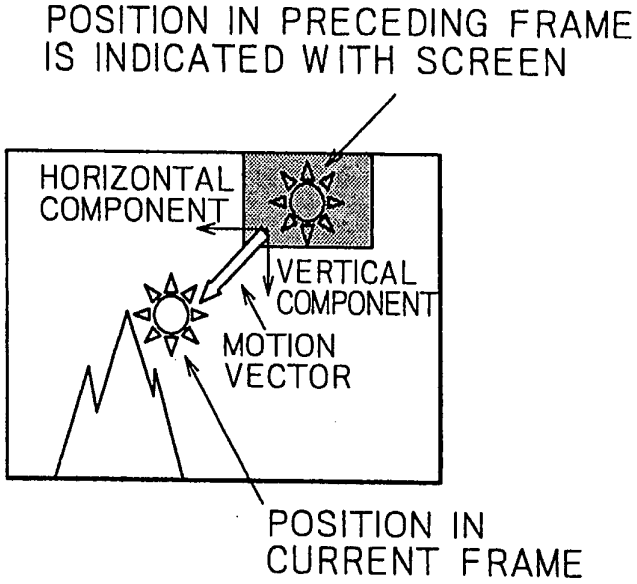


FIG. 4
PRIOR ART

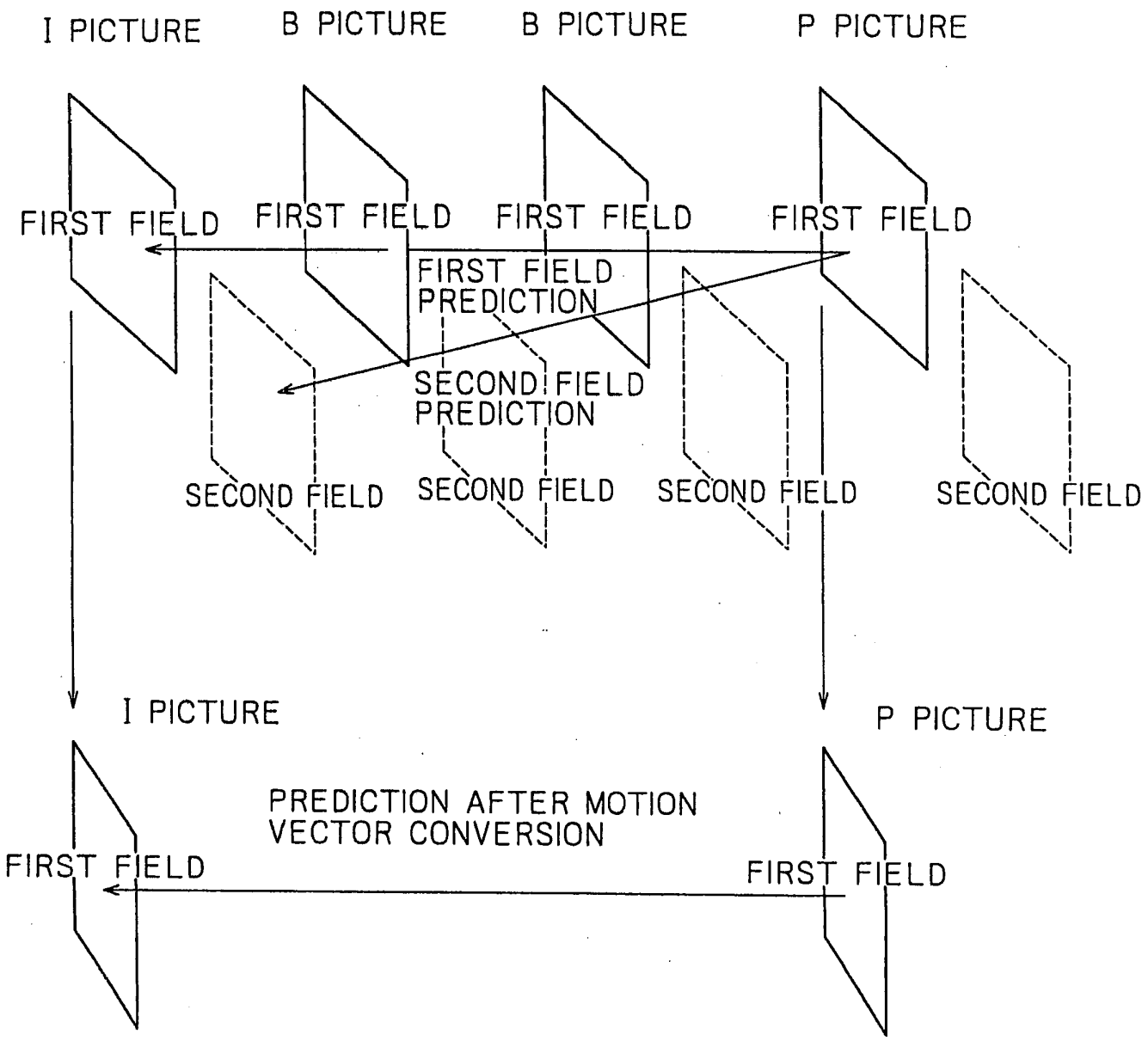


FIG. 5 PRIOR ART

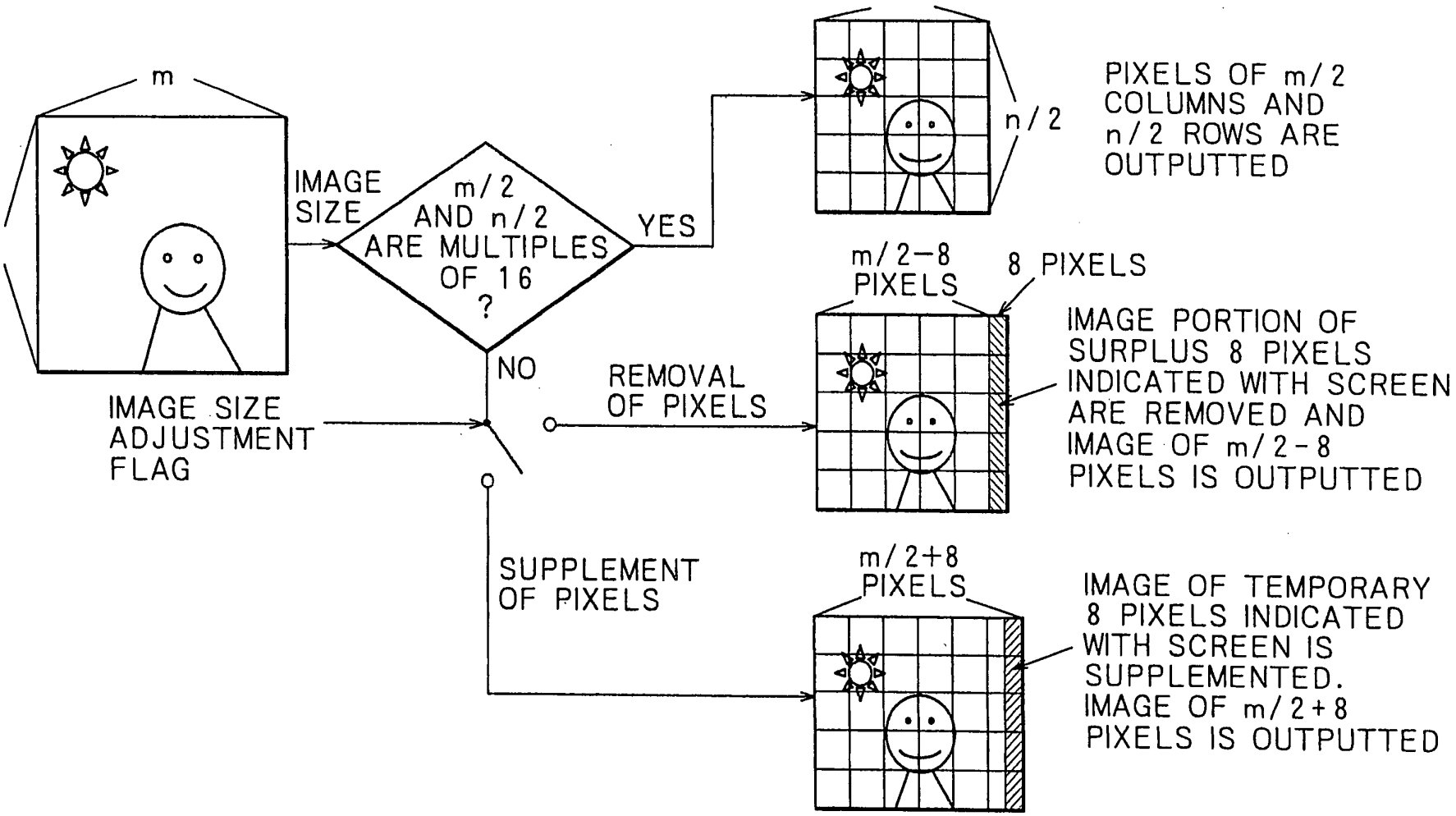


FIG. 6A PRIOR ART

FIG. 6B PRIOR ART

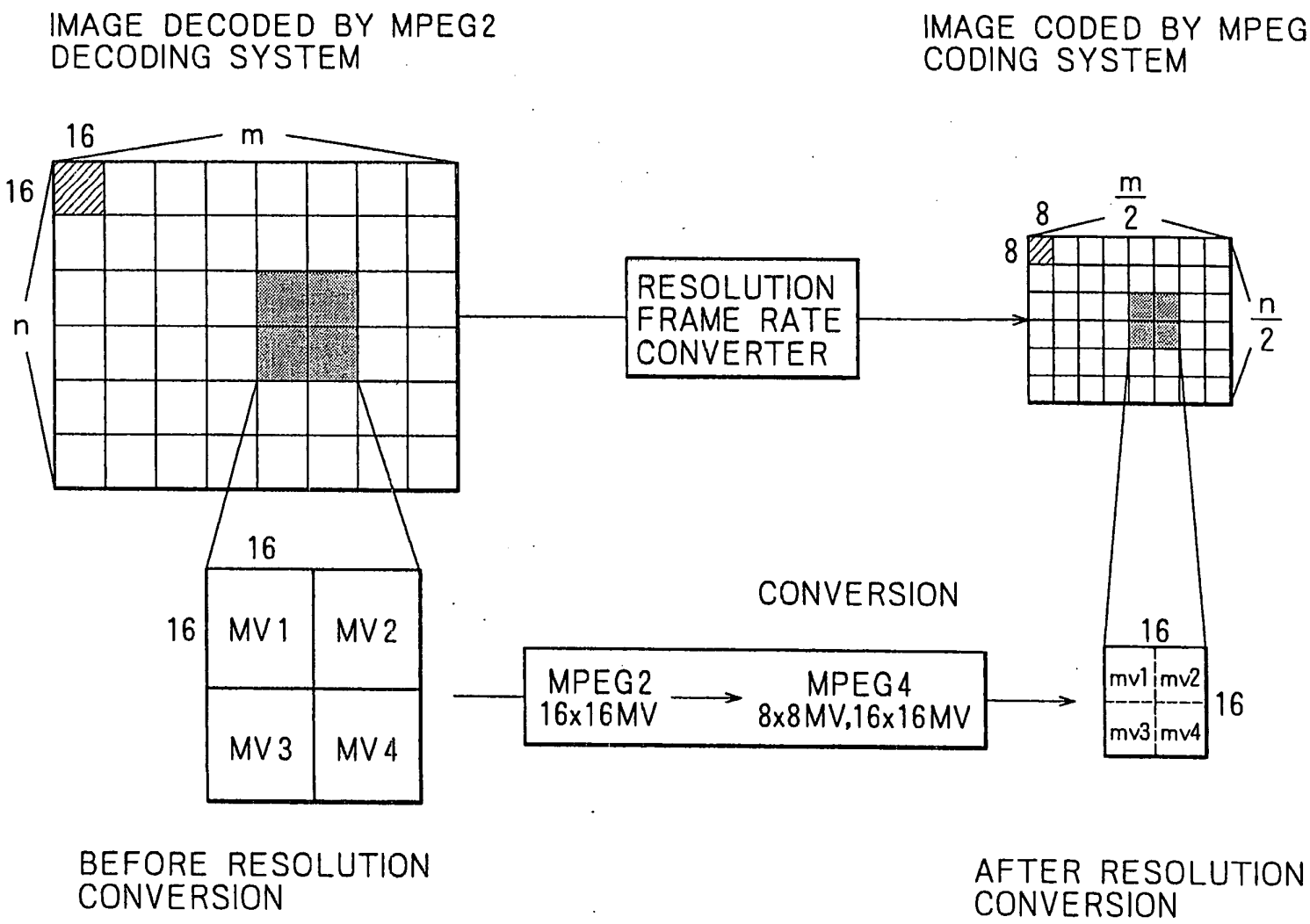


FIG. 7 PRIOR ART

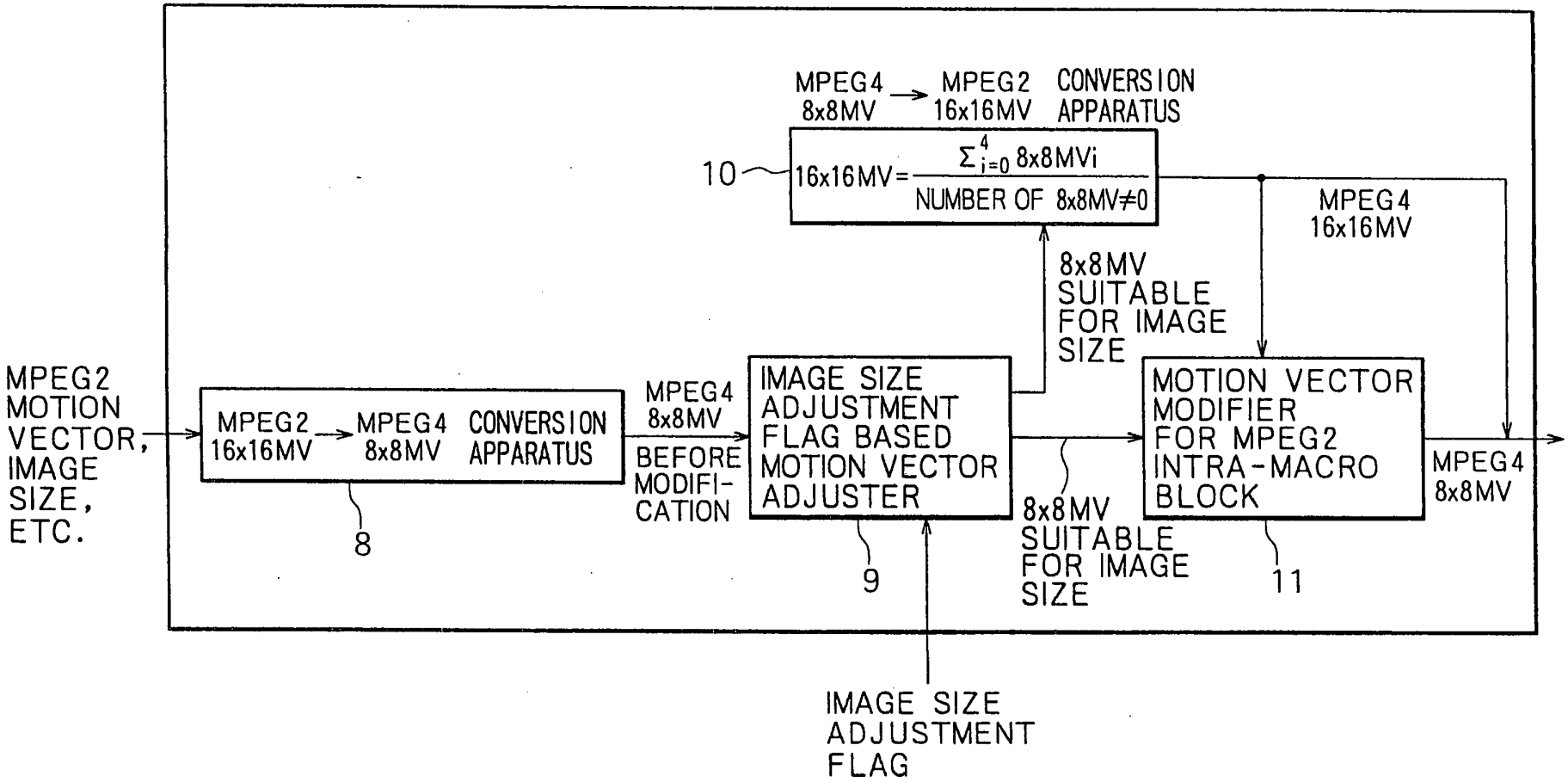


FIG. 8 PRIOR ART

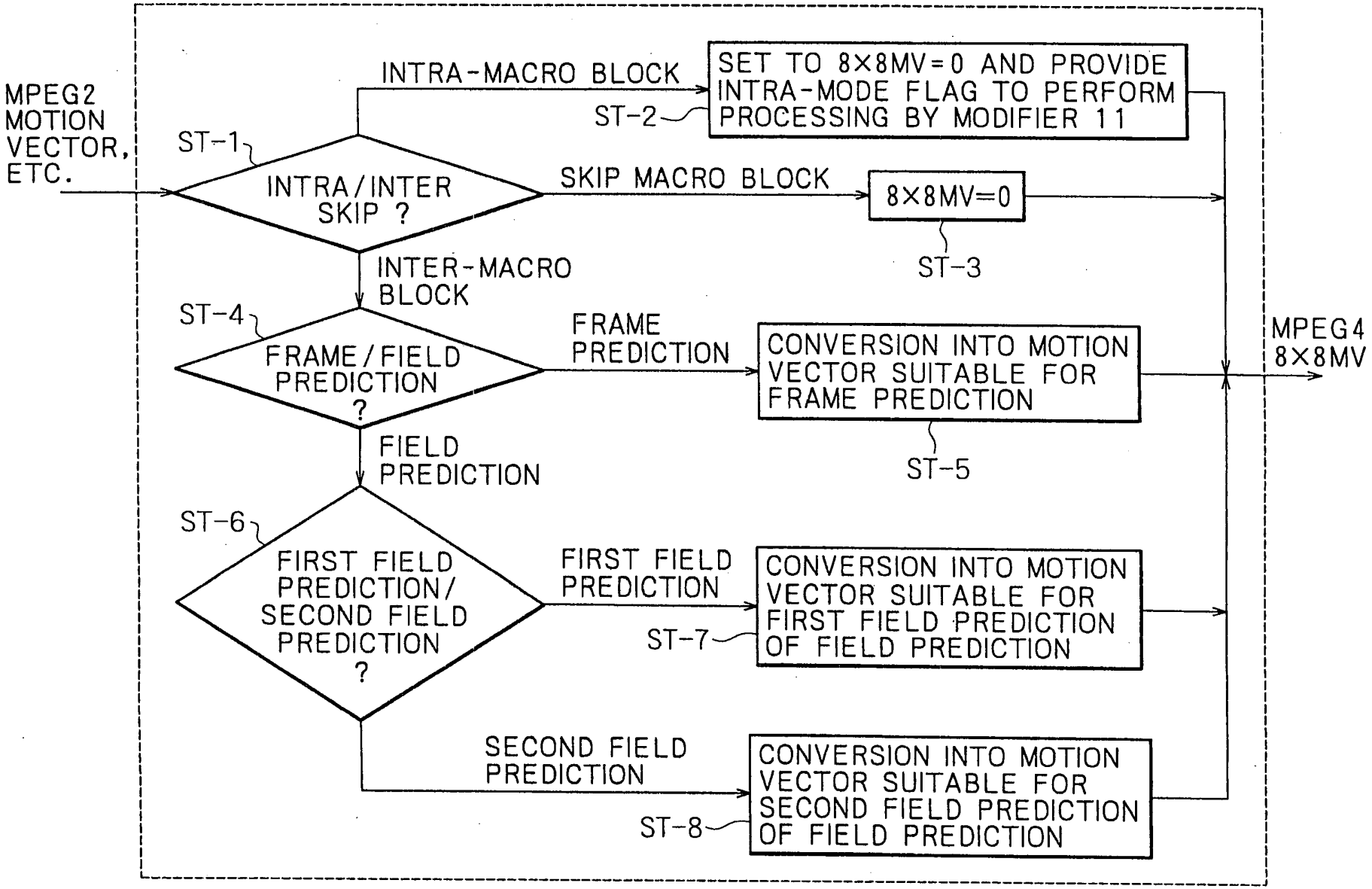


FIG. 9A PRIOR ART

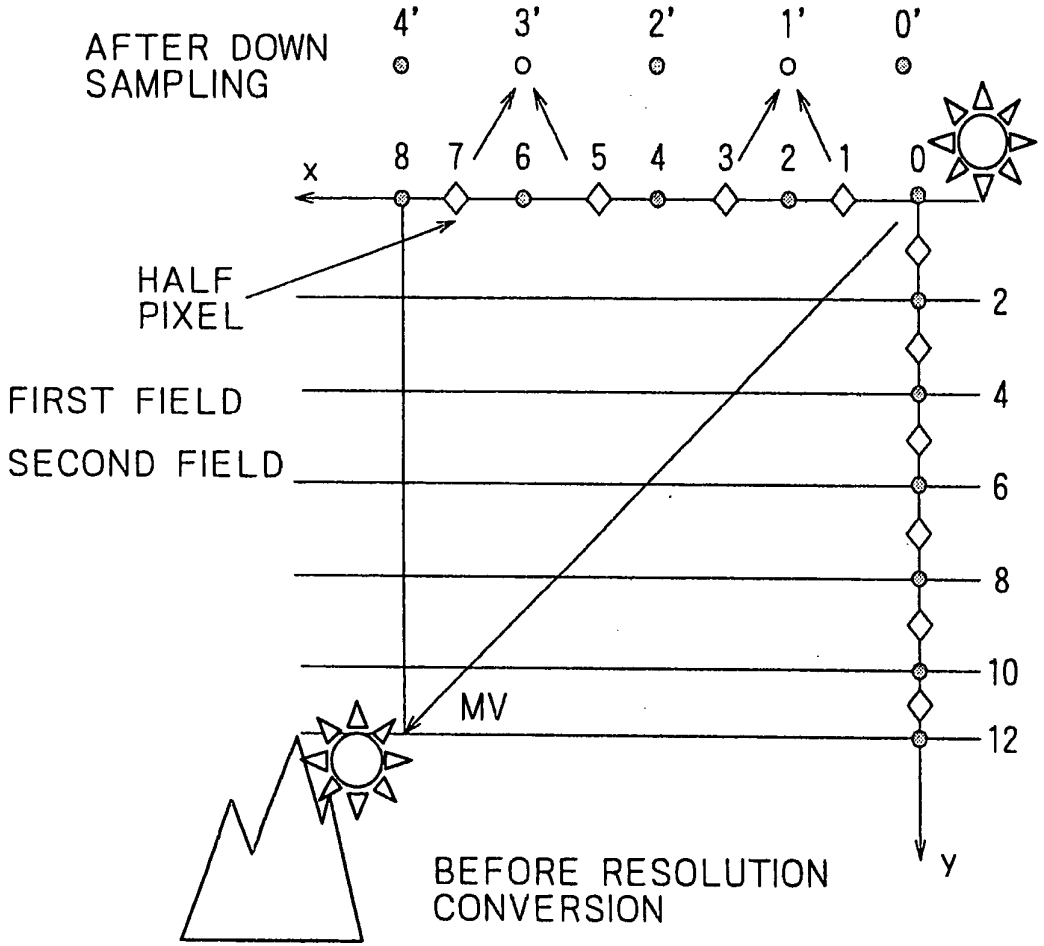


FIG. 9B PRIOR ART

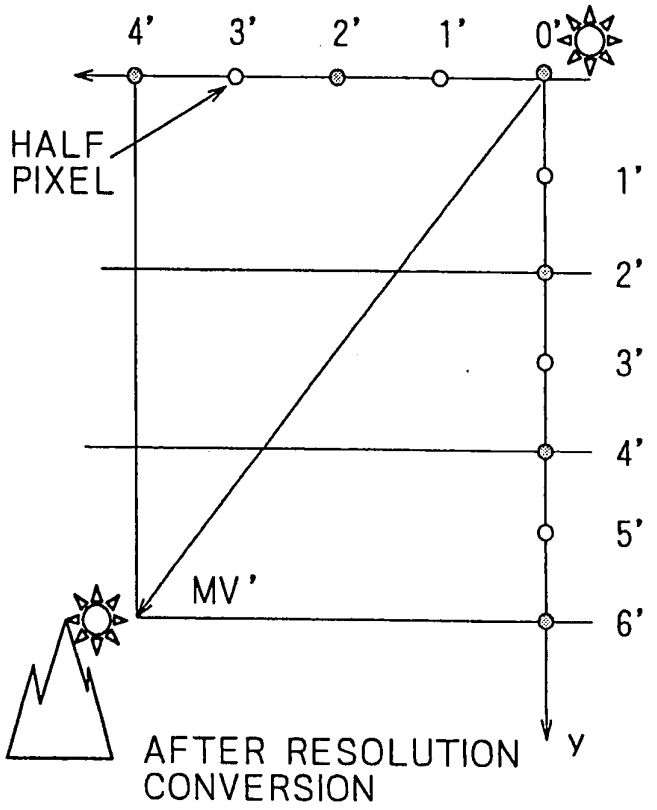


FIG. 10 PRIOR ART

REMAINDER WHEN MOTION VECTOR MV BEFORE CONVERSION IS DIVIDED BY 4	0	1	2	3
MOTION VECTOR AFTER CONVERSION	[MV/2]	[MV/2]+1	[MV/2]	[MV/2]

[MV/2] REPRESENTS INTEGER PART WHEN MV IS DIVIDED BY 2

FIG. 11A PRIOR ART

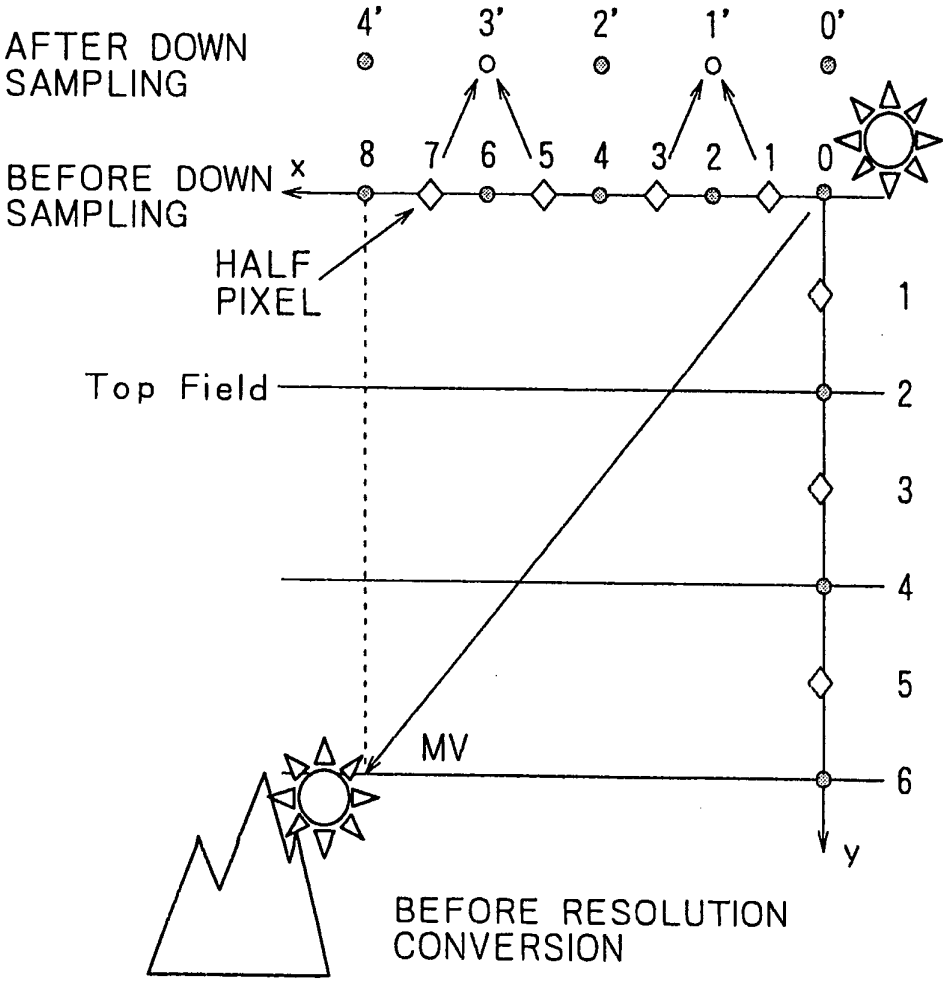
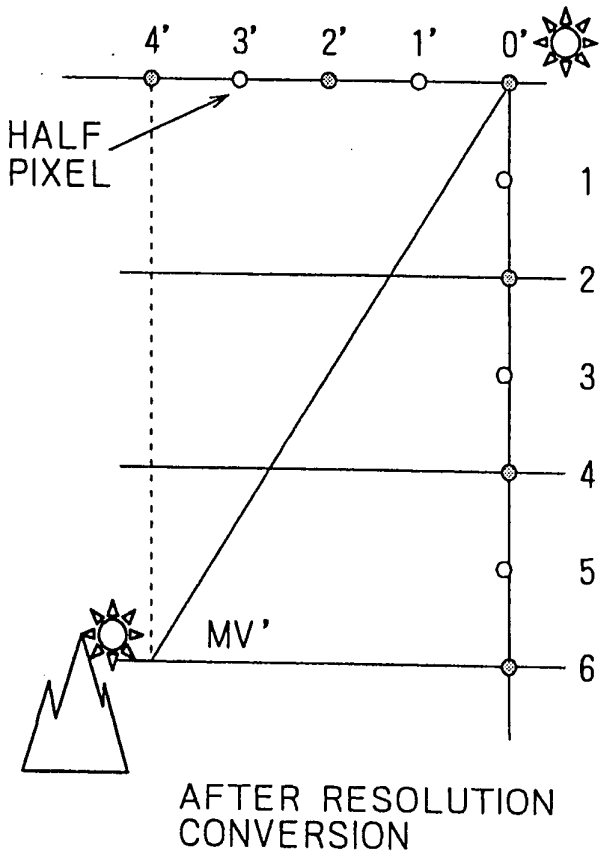


FIG. 11B PRIOR ART



PRIOR ART

FIG. 12A

PRIOR ART

FIG. 12B

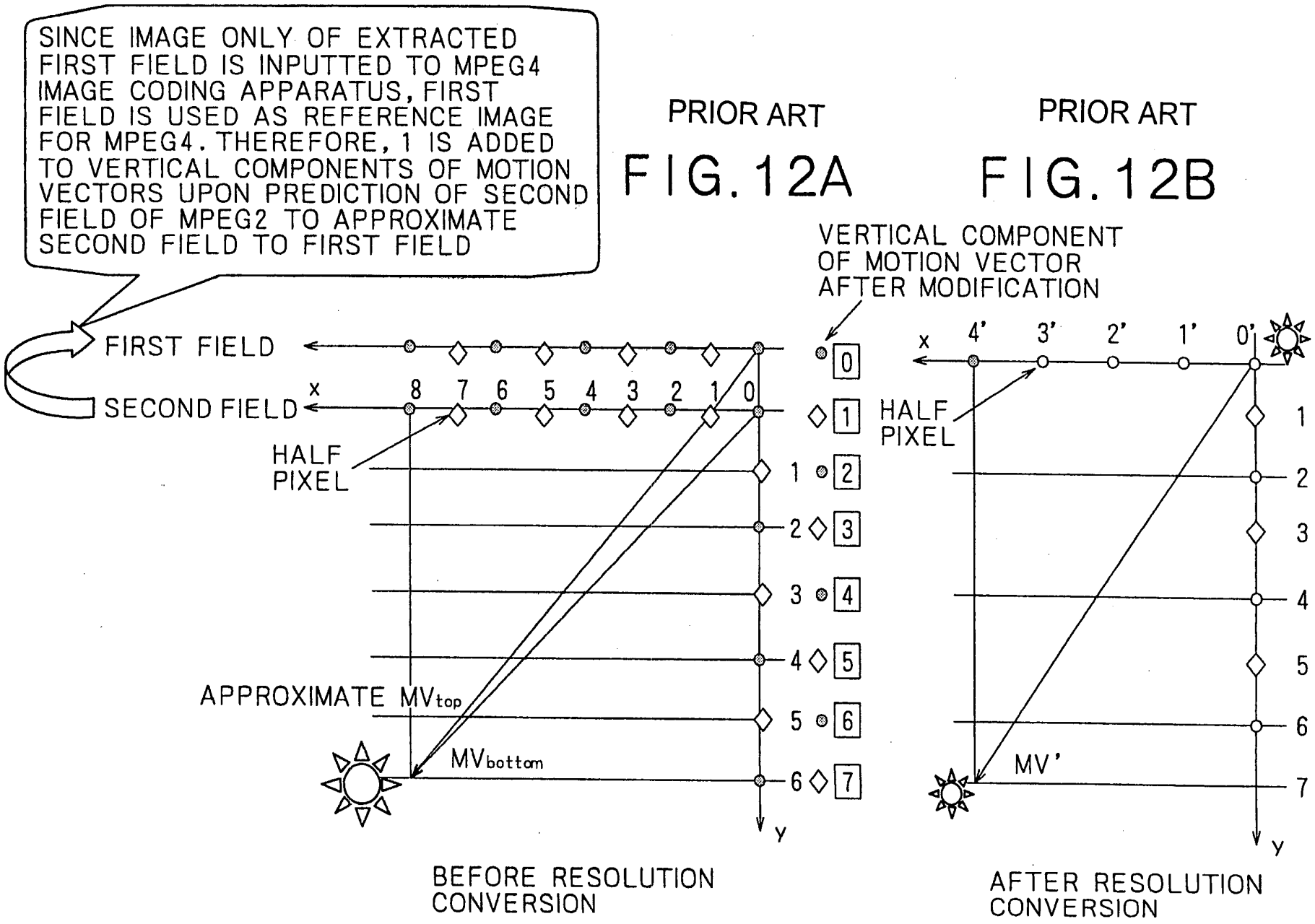


FIG. 13 PRIOR ART

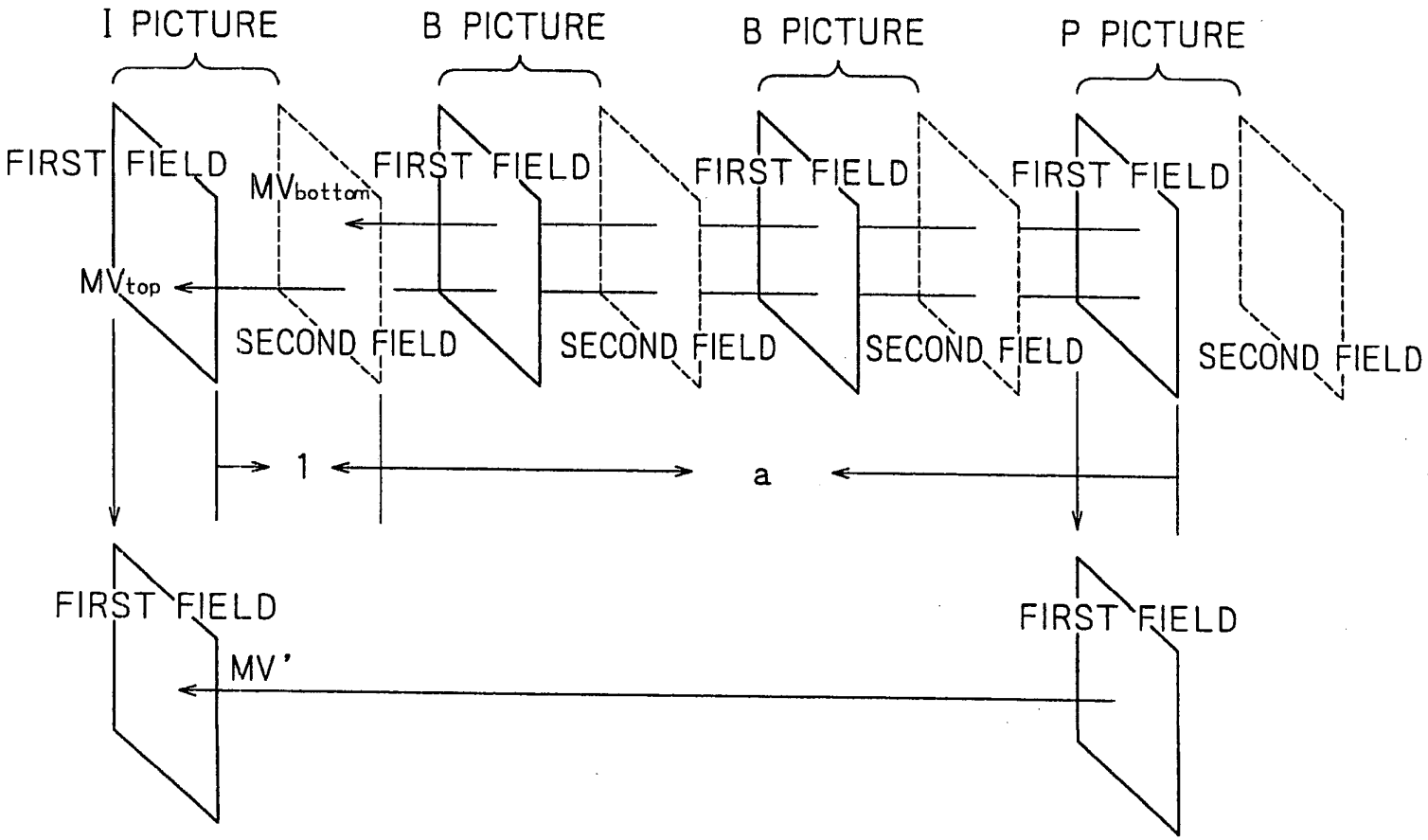


FIG. 14 PRIOR ART

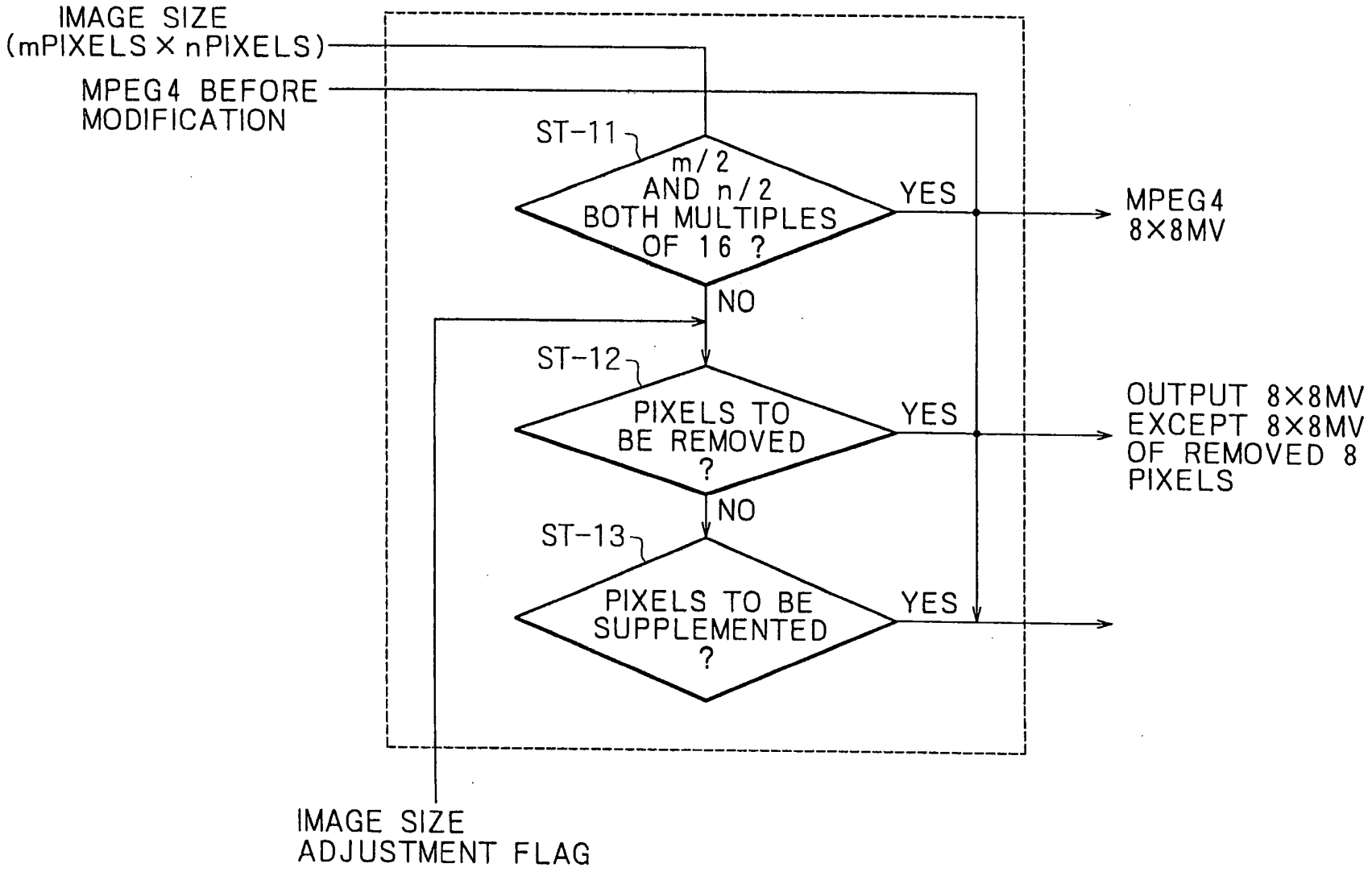


FIG. 15 PRIOR ART

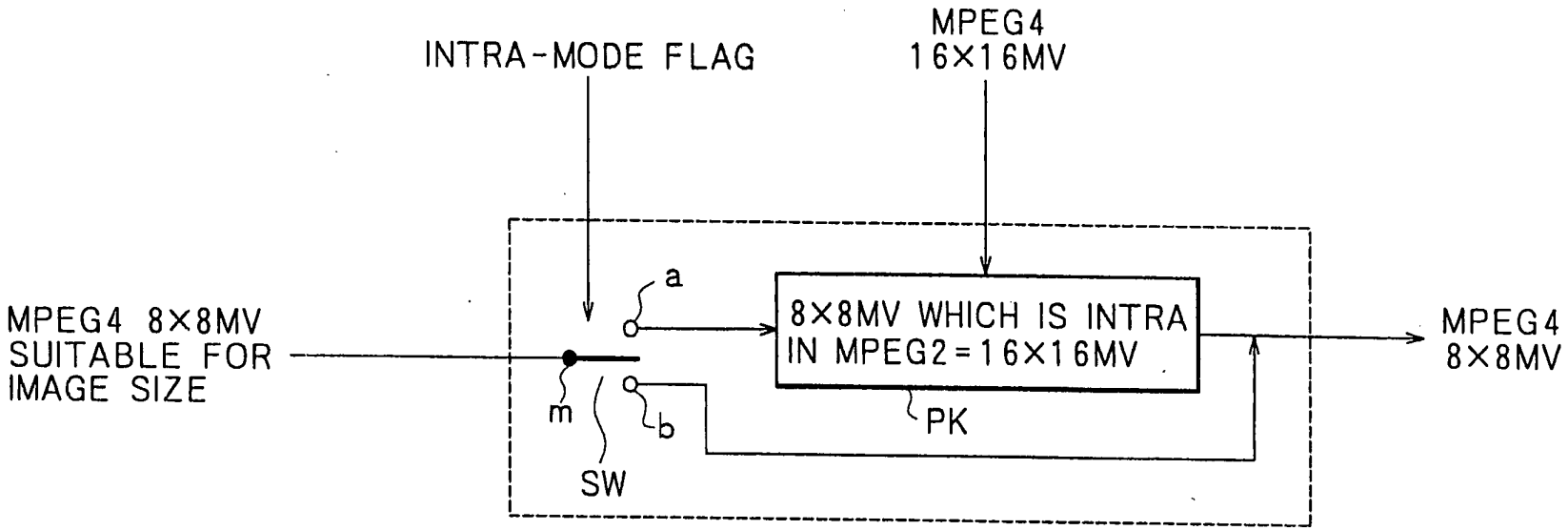


FIG. 16 PRIOR ART

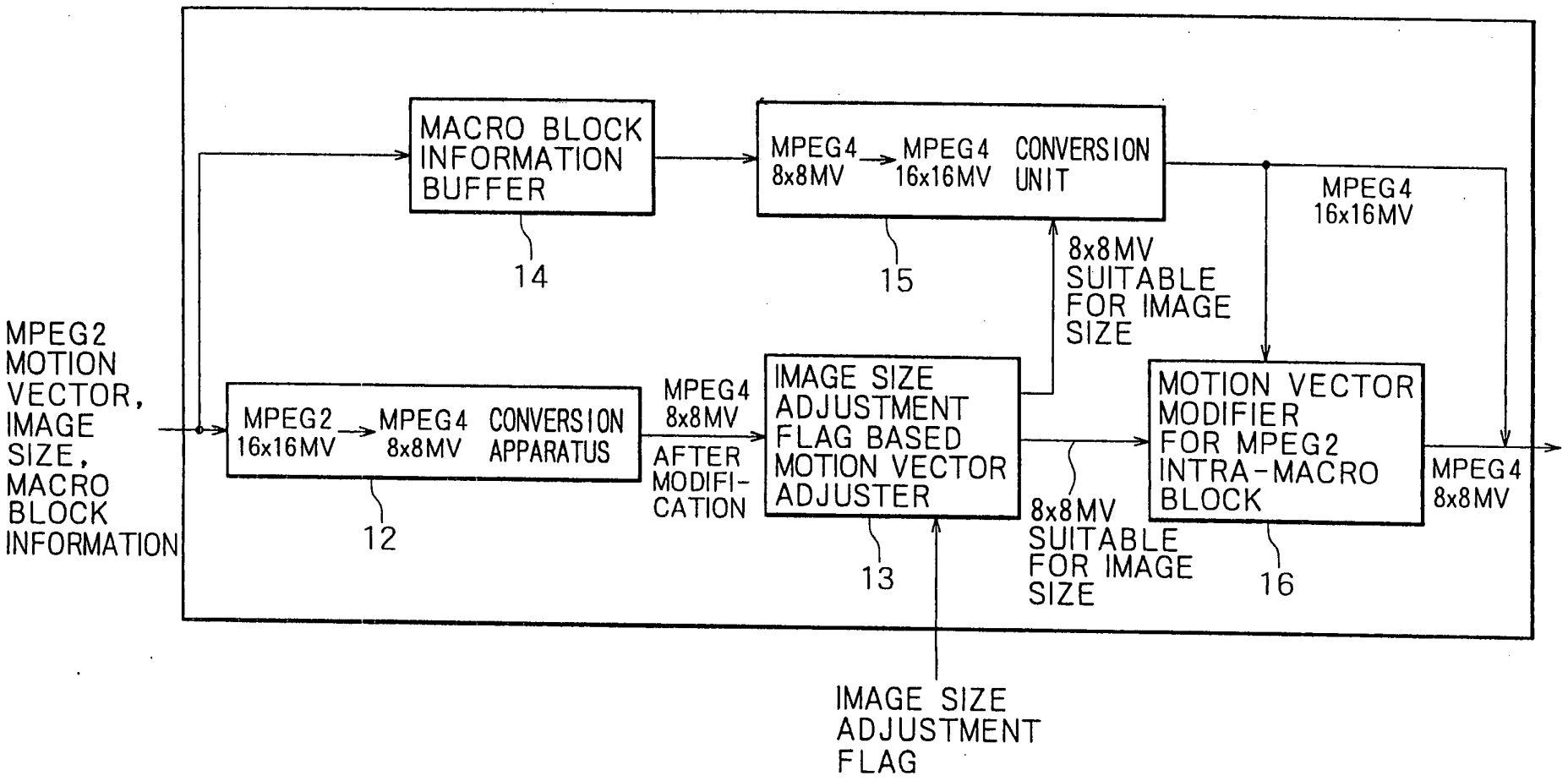


FIG. 17A PRIOR ART

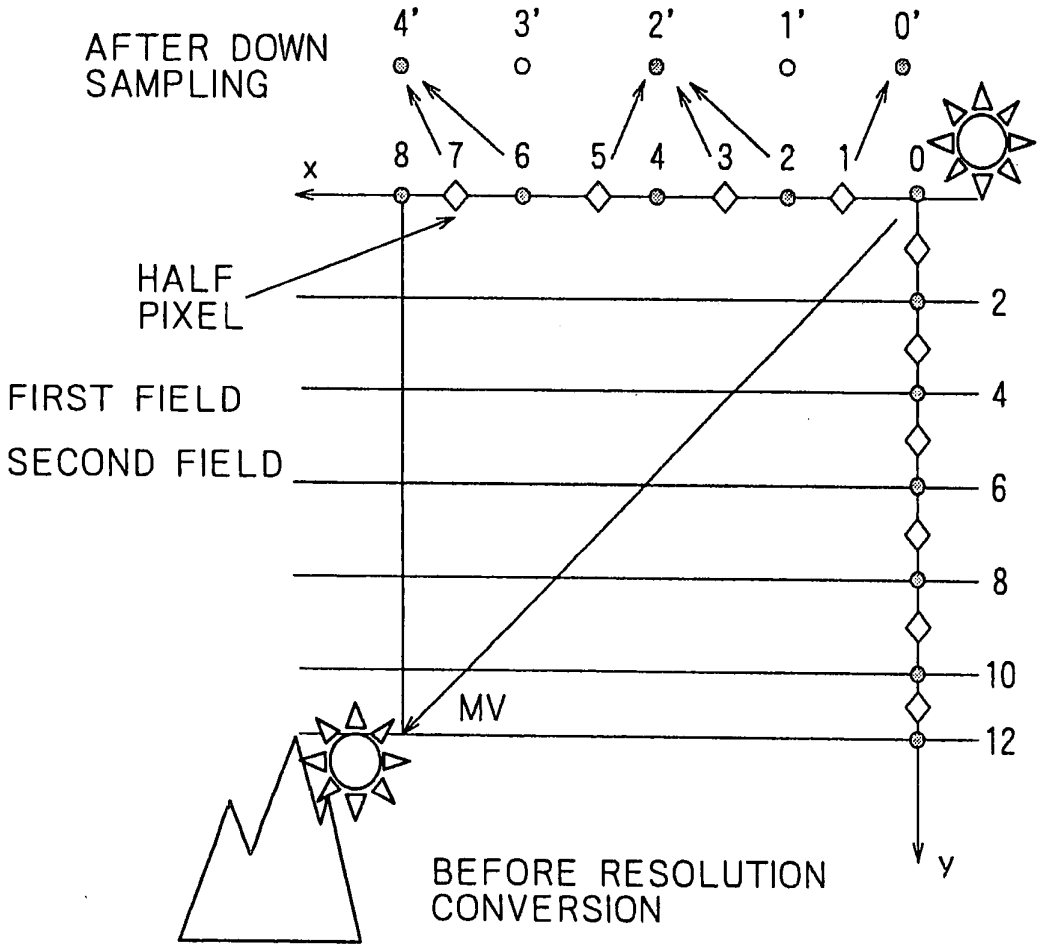


FIG. 17B PRIOR ART

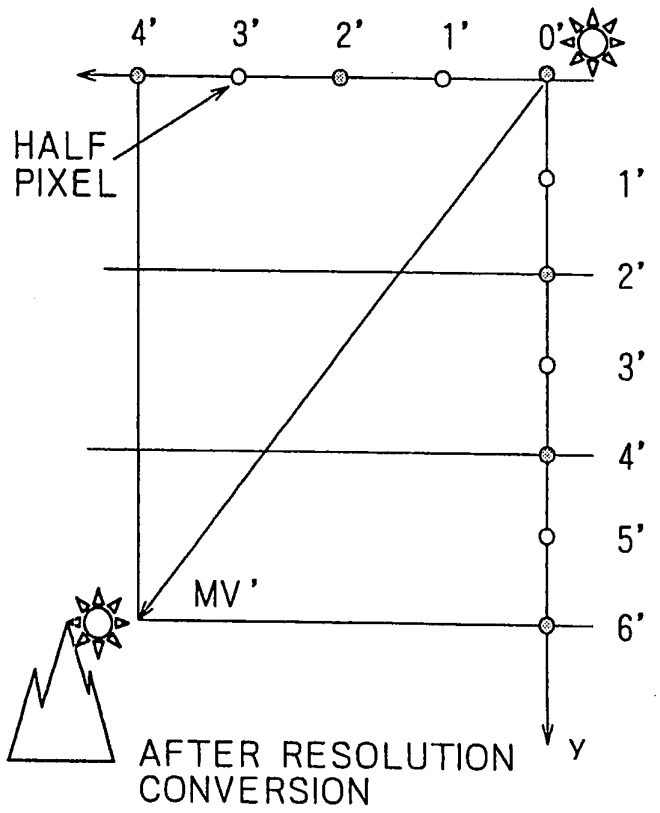


FIG. 18 PRIOR ART

REMAINDER WHEN MOTION VECTOR MV BEFORE CONVERSION IS DIVIDED BY 4	0	1	2	3
MOTION VECTLE AFTER CONVERSION	[MV/2]	[MV/2]	[MV/2]+1	[MV/2]

[MV/2] REPRESENTS INTEGER PART WHEN MV IS DIVIDED BY 2

FIG. 19A PRIOR ART

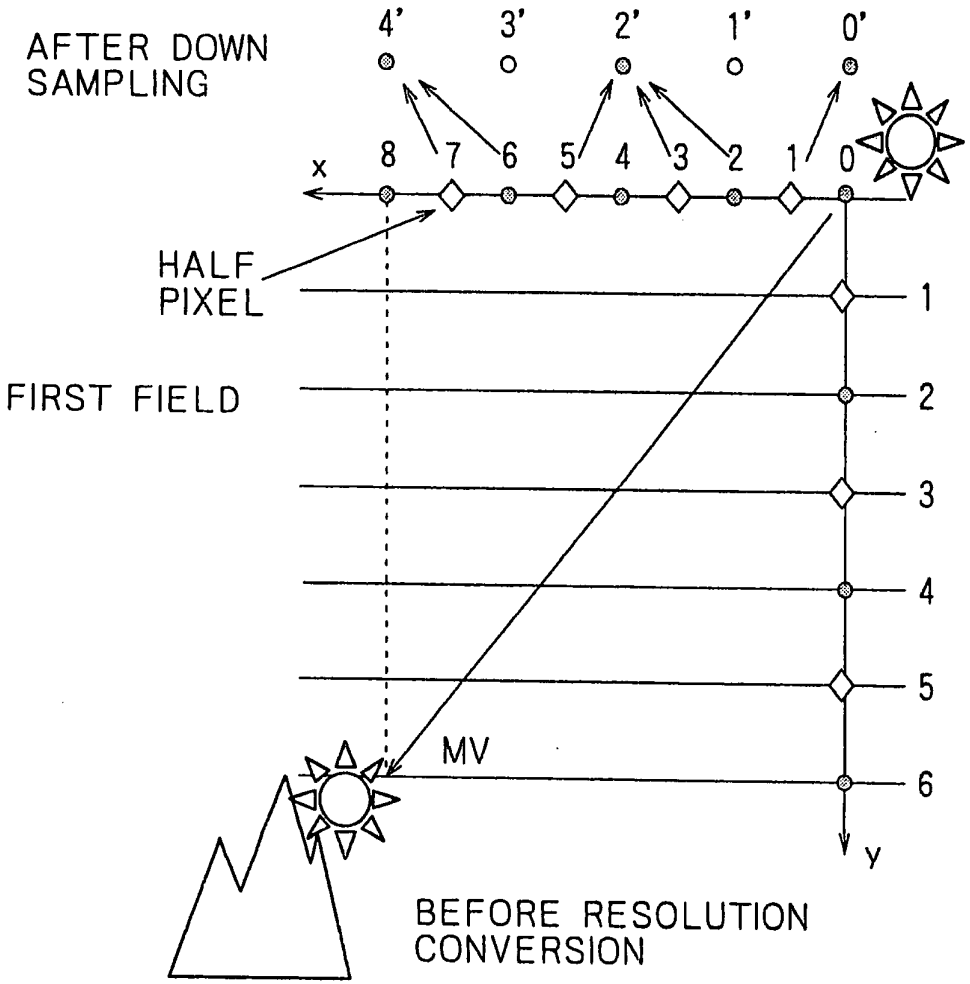
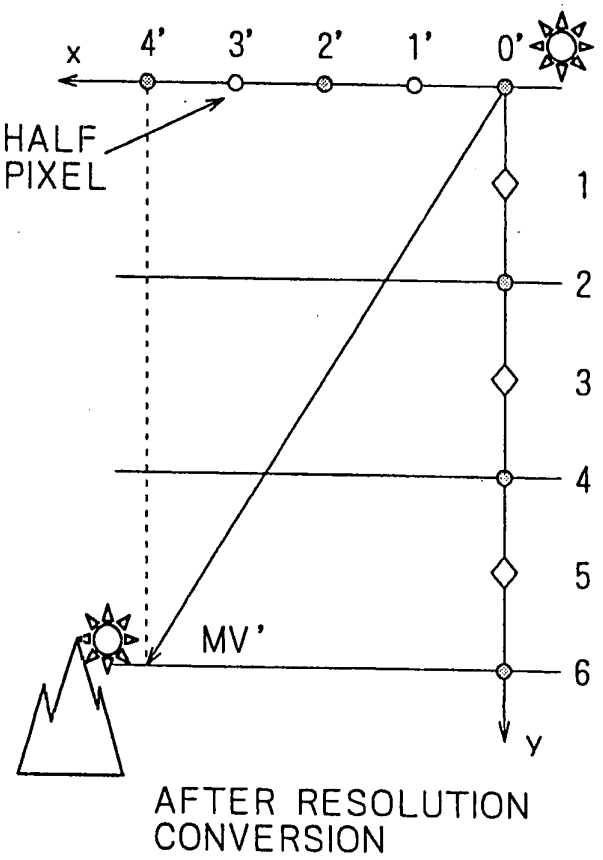


FIG. 19B PRIOR ART



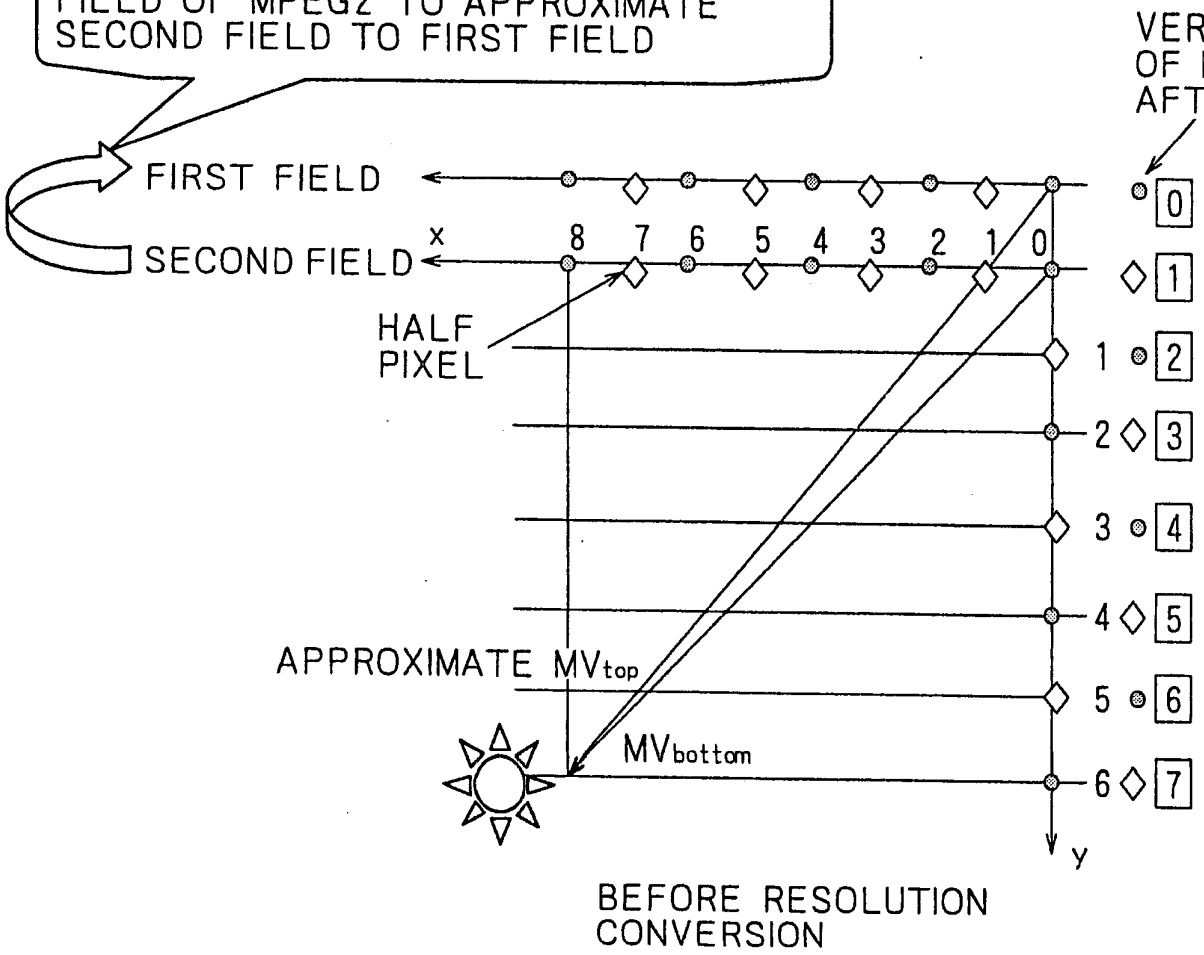
SINCE IMAGE ONLY OF EXTRACTED FIRST FIELD IS INPUTTED TO MPEG4 IMAGE CODING APPARATUS, FIRST FIELD IS USED AS REFERENCE IMAGE FOR MPEG4. THEREFORE, 1 IS ADDED TO VERTICAL COMPONENTS OF MOTION VECTORS UPON PREDICTION OF SECOND FIELD OF MPEG2 TO APPROXIMATE SECOND FIELD TO FIRST FIELD

PRIOR ART

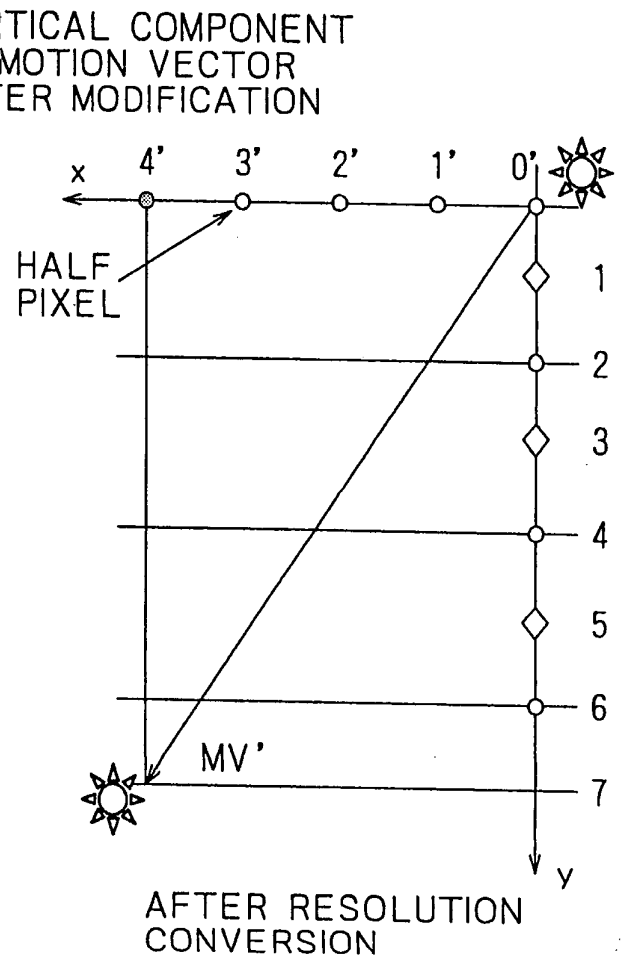
FIG. 20A

PRIOR ART

FIG. 20B



BEFORE RESOLUTION CONVERSION



AFTER RESOLUTION CONVERSION

FIG. 21 PRIOR ART

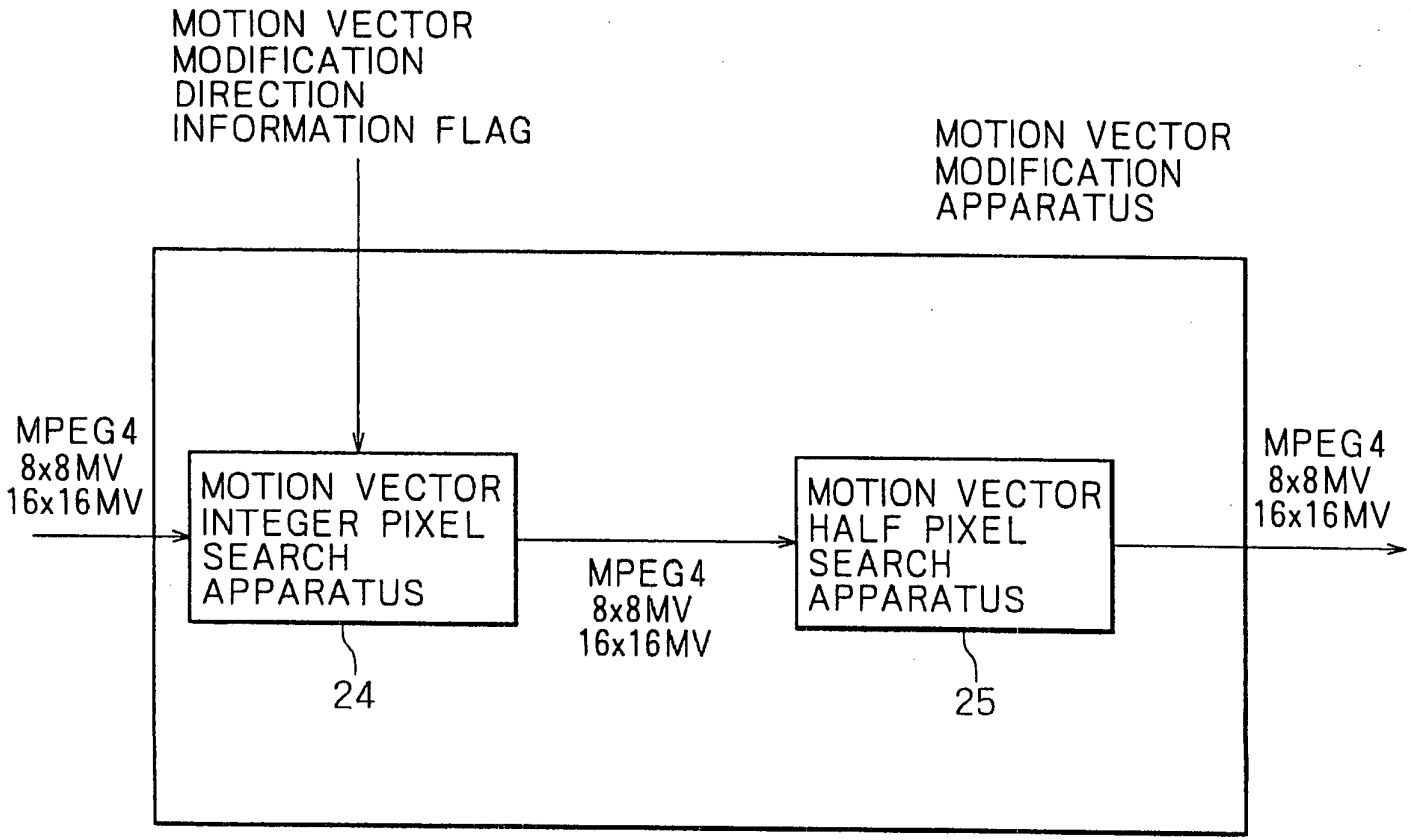
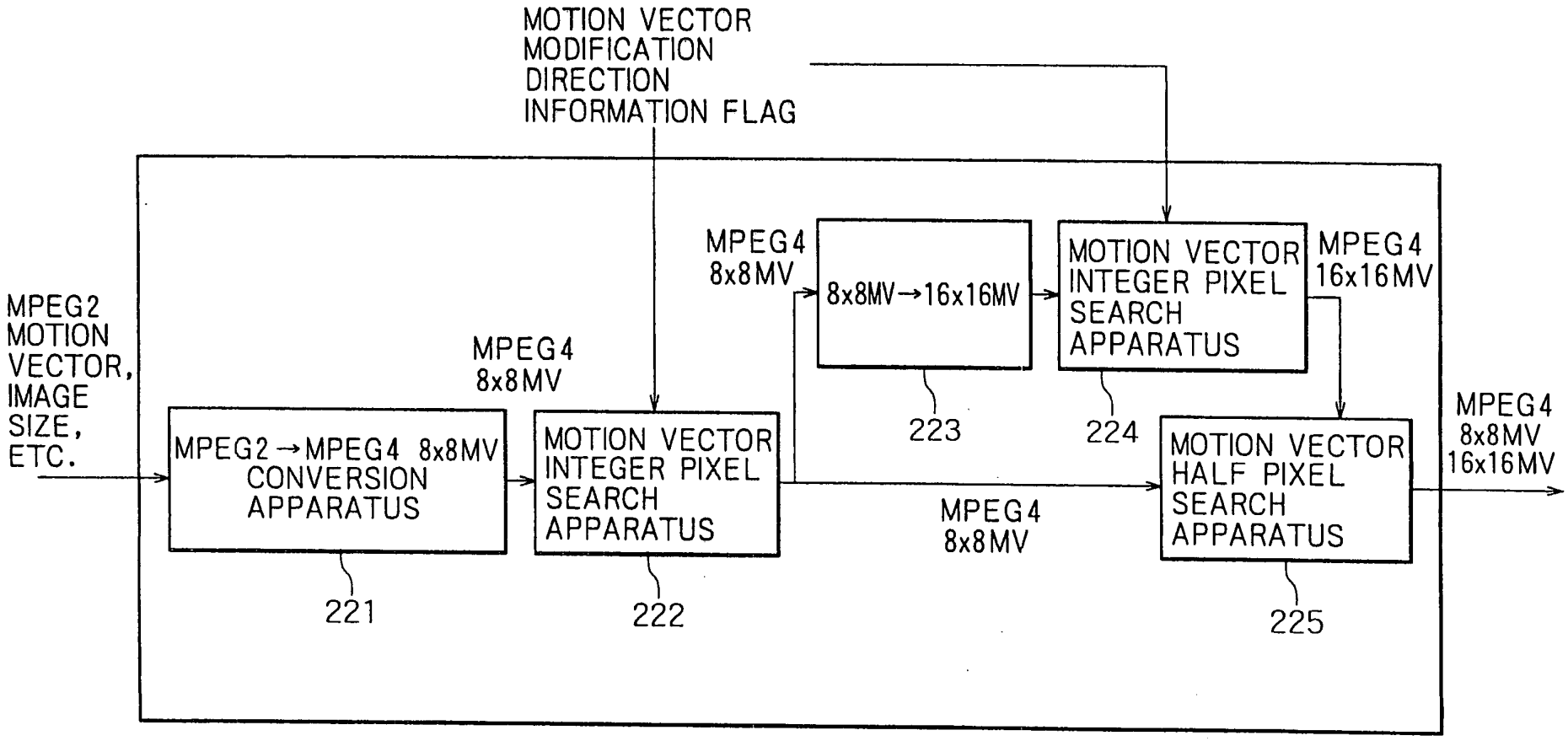


FIG. 22 PRIOR ART



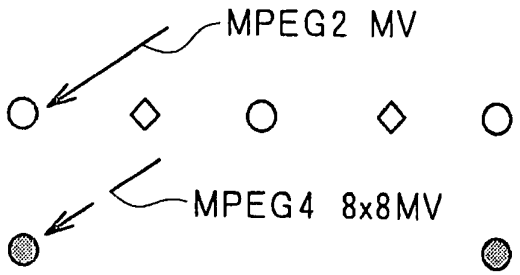
MOTION VECTOR CONVERSION APPARATUS

○ MPEG2 INTEGER PIXEL ◍ MPEG4 INTEGER PIXEL

◇ MPEG2 HALF PIXEL

FIG. 23A PRIOR ART

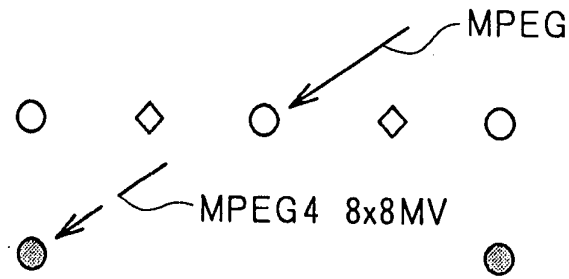
MODIFICATION FROM MPEG2 INTEGER PIXEL TO MPEG4



MOTION VECTOR FORWARD DIRECTION

FIG. 23B PRIOR ART

MODIFICATION FROM MPEG2 INTEGER PIXEL TO MPEG4 INTEGER PIXEL OF FORWARD DIRECTION



MOTION VECTOR FORWARD DIRECTION

○ MPEG2 INTEGER PIXEL ◍ MPEG4 INTEGER PIXEL

◇ MPEG2 HALF PIXEL

FIG. 24A PRIOR ART

MODIFICATION FROM MPEG2 INTEGER PIXEL TO MPEG4 INTEGER PIXEL VALUE OF FORWARD DIRECTION

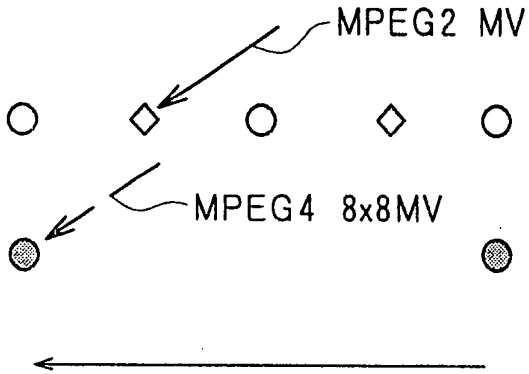
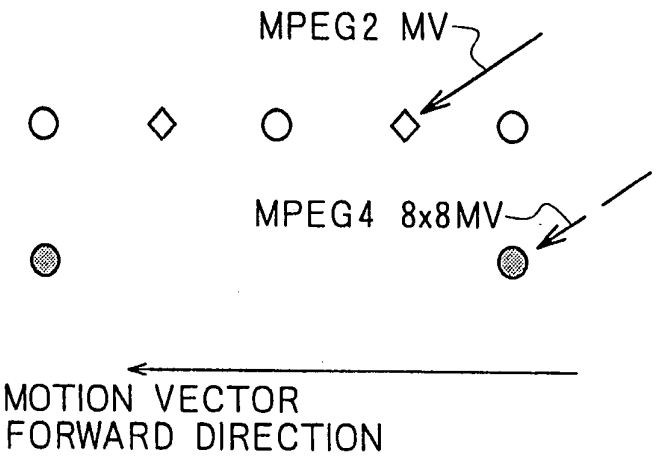


FIG. 24B PRIOR ART

MODIFICATION FROM MPEG2 INTEGER PIXEL TO MPEG4 INTEGER PIXEL VALUE OF REVERSE DIRECTION



PRIOR ART

FIG. 25

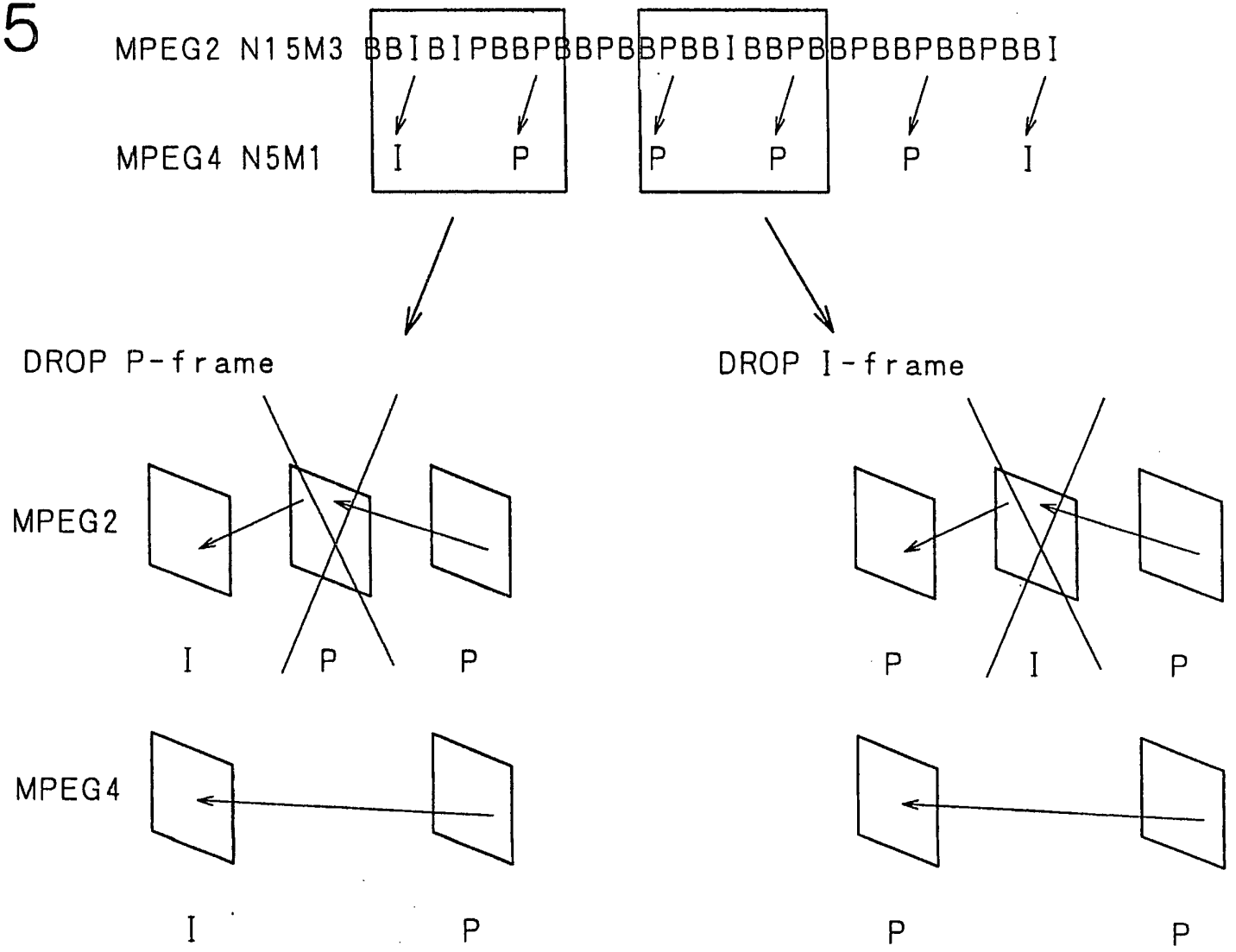
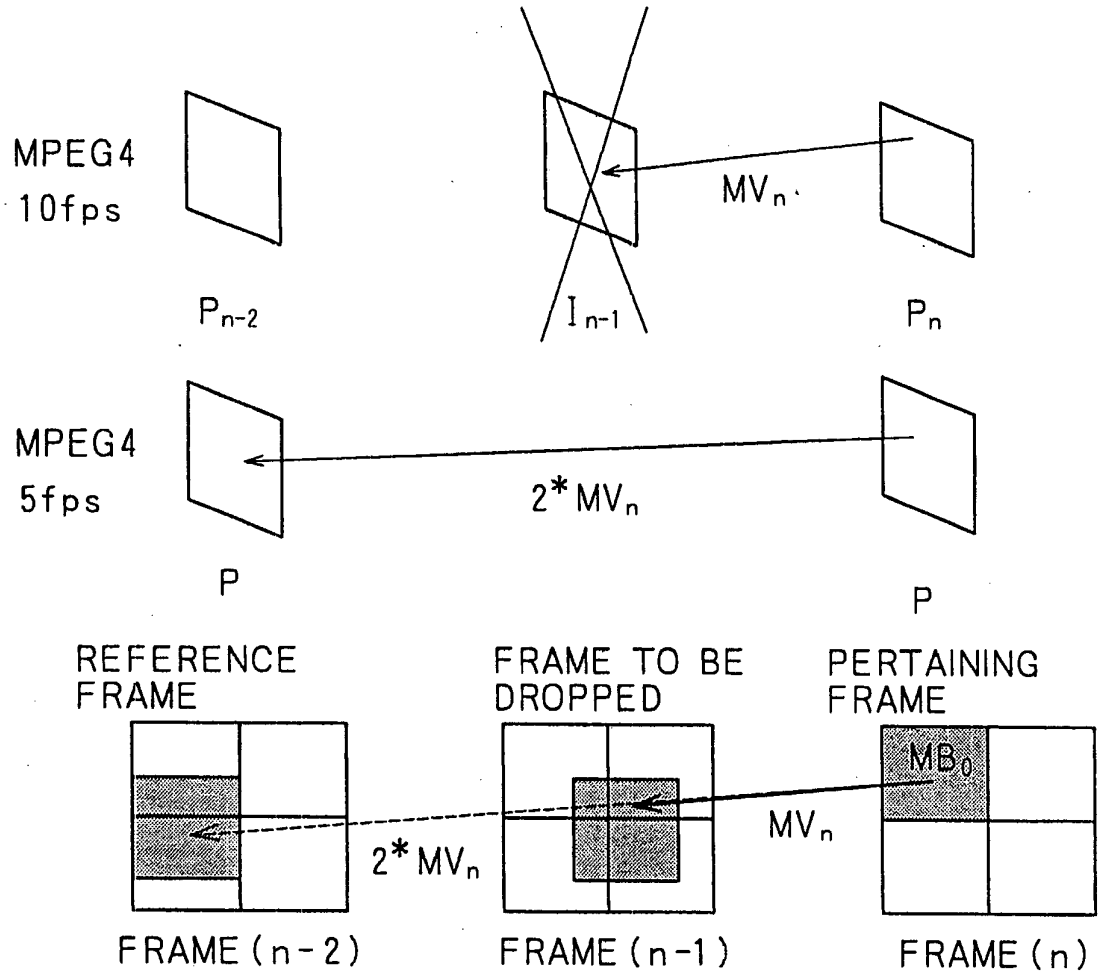


FIG. 26 PRIOR ART



EXTEND MOTION VECTOR TO TWICE LENGTH TO PERFORM TEMPORAL MODIFICATION

FIG. 27 PRIOR ART

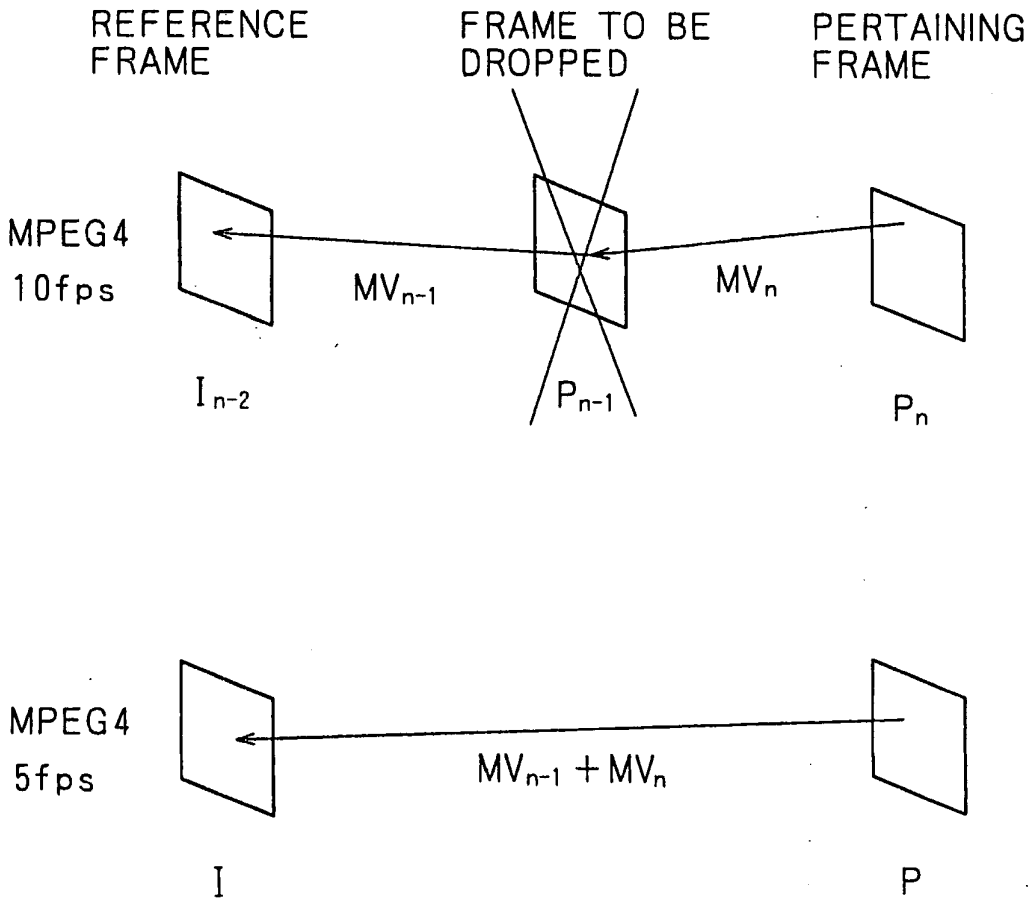
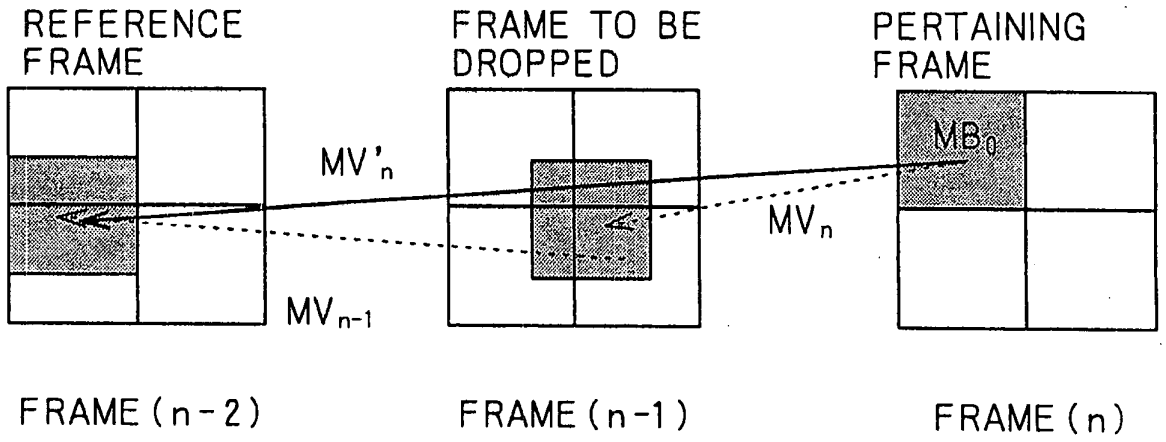


FIG. 28 PRIOR ART

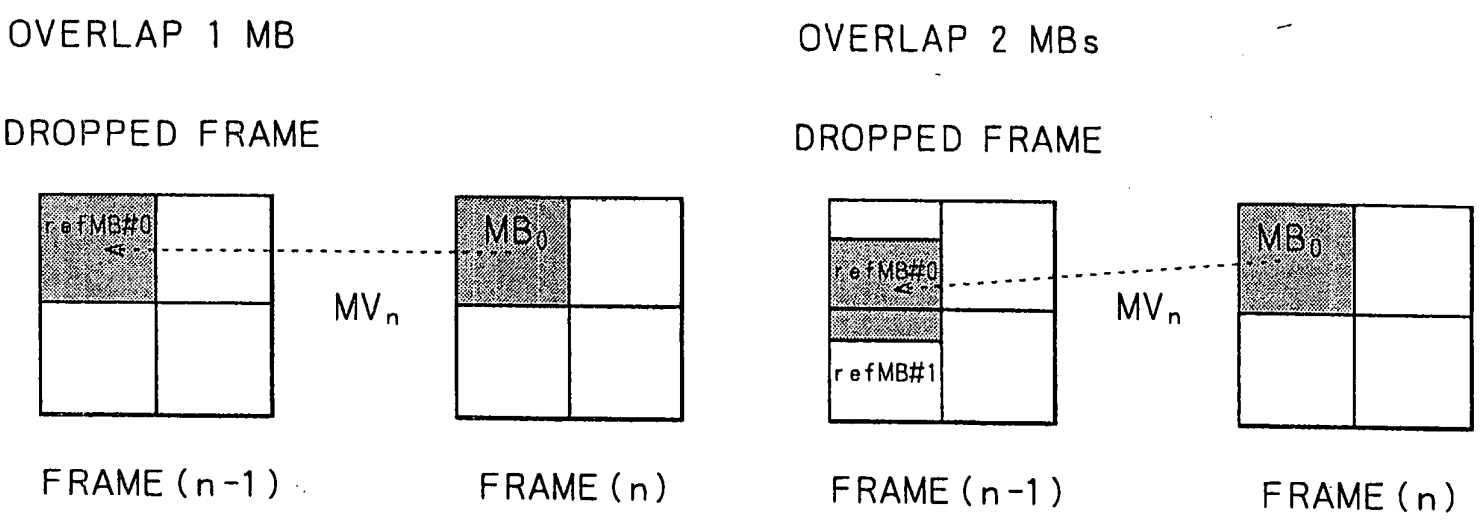


SELECT MV_{n-1} WHICH EXHIBITS MAXIMUM PARAMETER X
(WHERE X IS ONE OF THE FOLLOWINGS)

- MB overlapped area
- MB overlapped area/Coefbits
- MB overlapped area/Q-scale
- MB overlapped area/(Coefbits×Q-scale)

$MV'_n = MV_n + MV_{n-1}$

FIG. 29 PRIOR ART



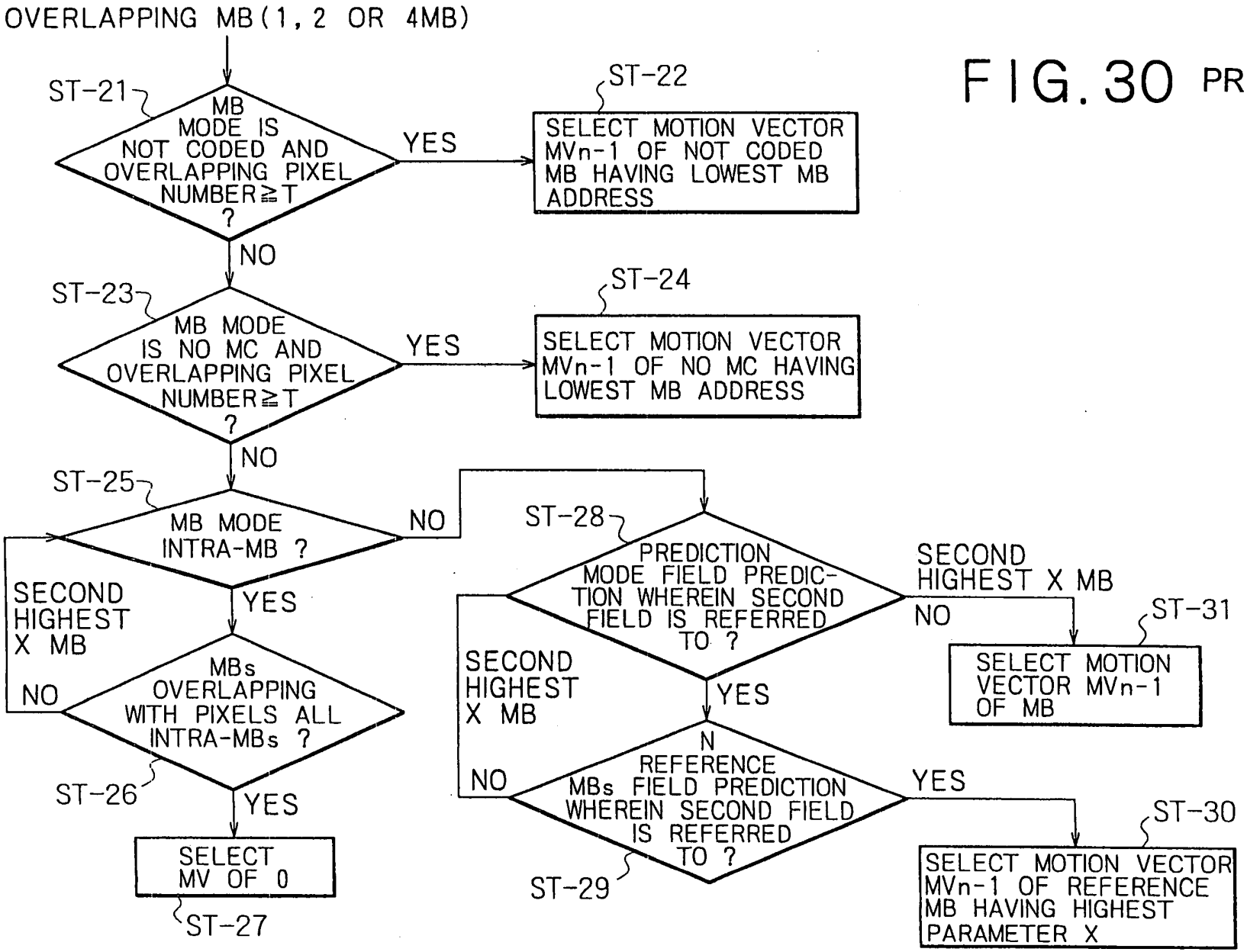


FIG. 30 PRIOR ART

FIG. 31 PRIOR ART

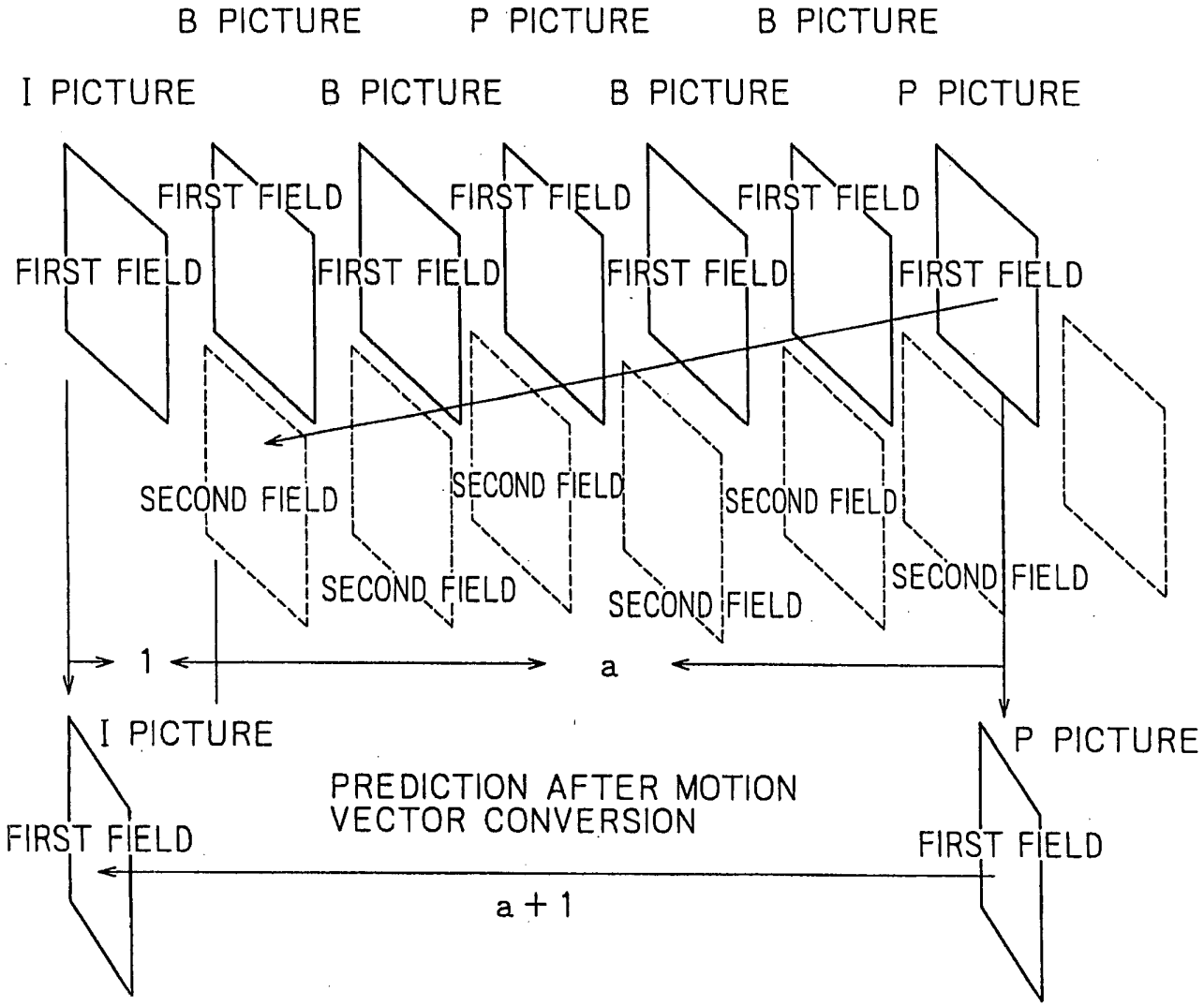


FIG. 32 PRIOR ART

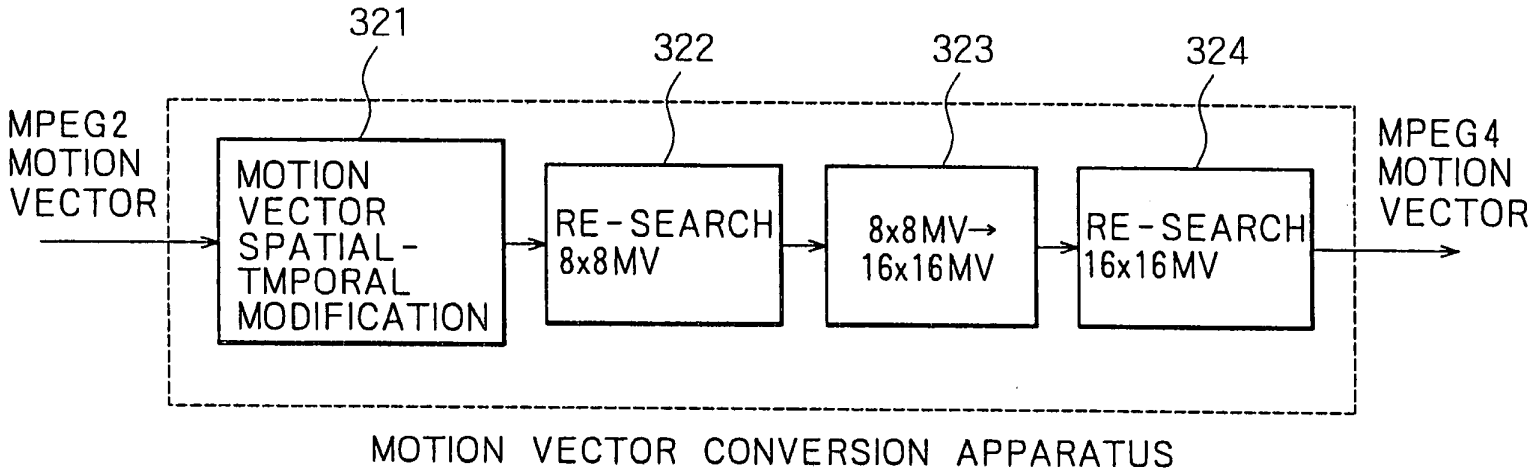
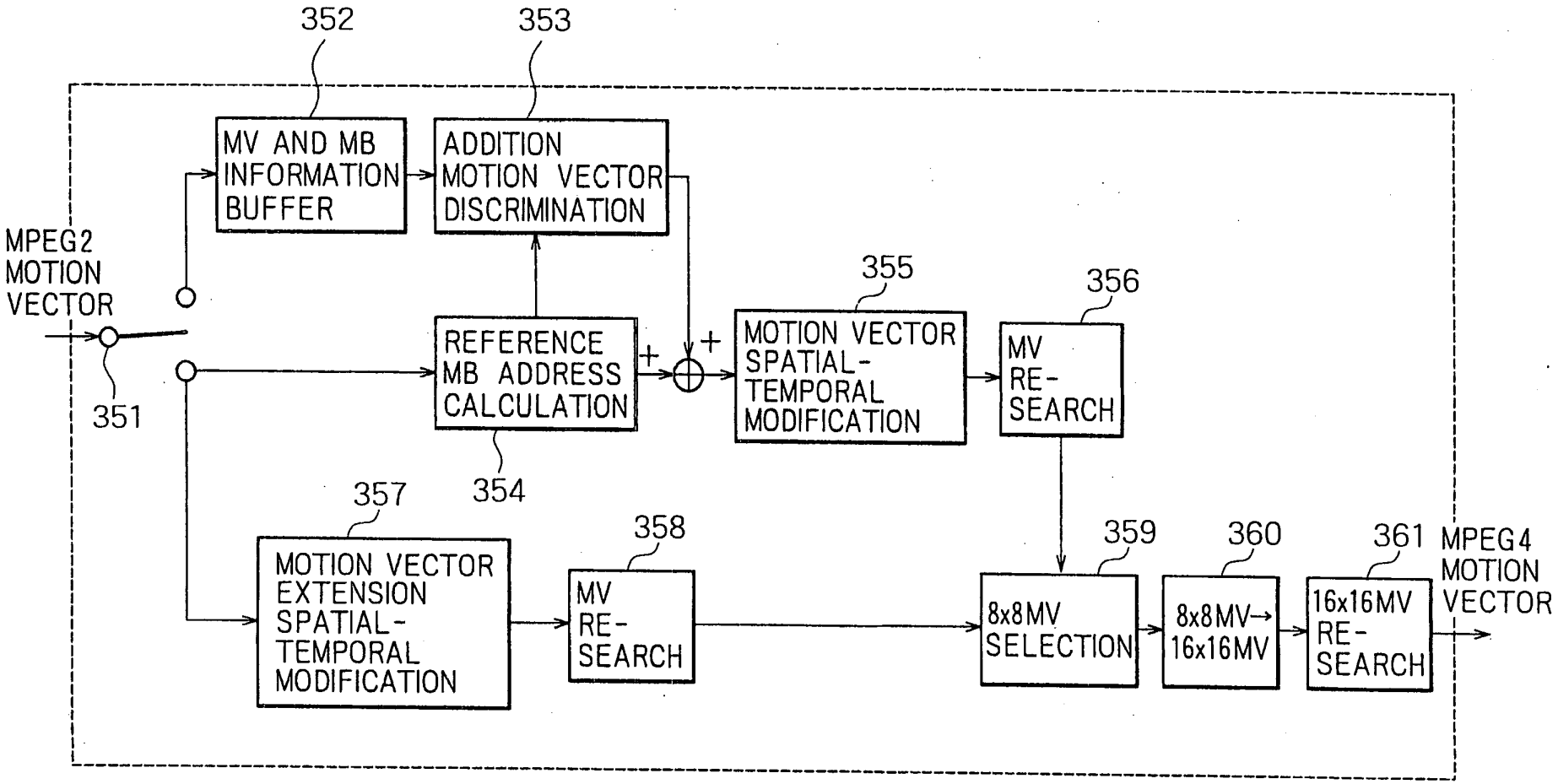
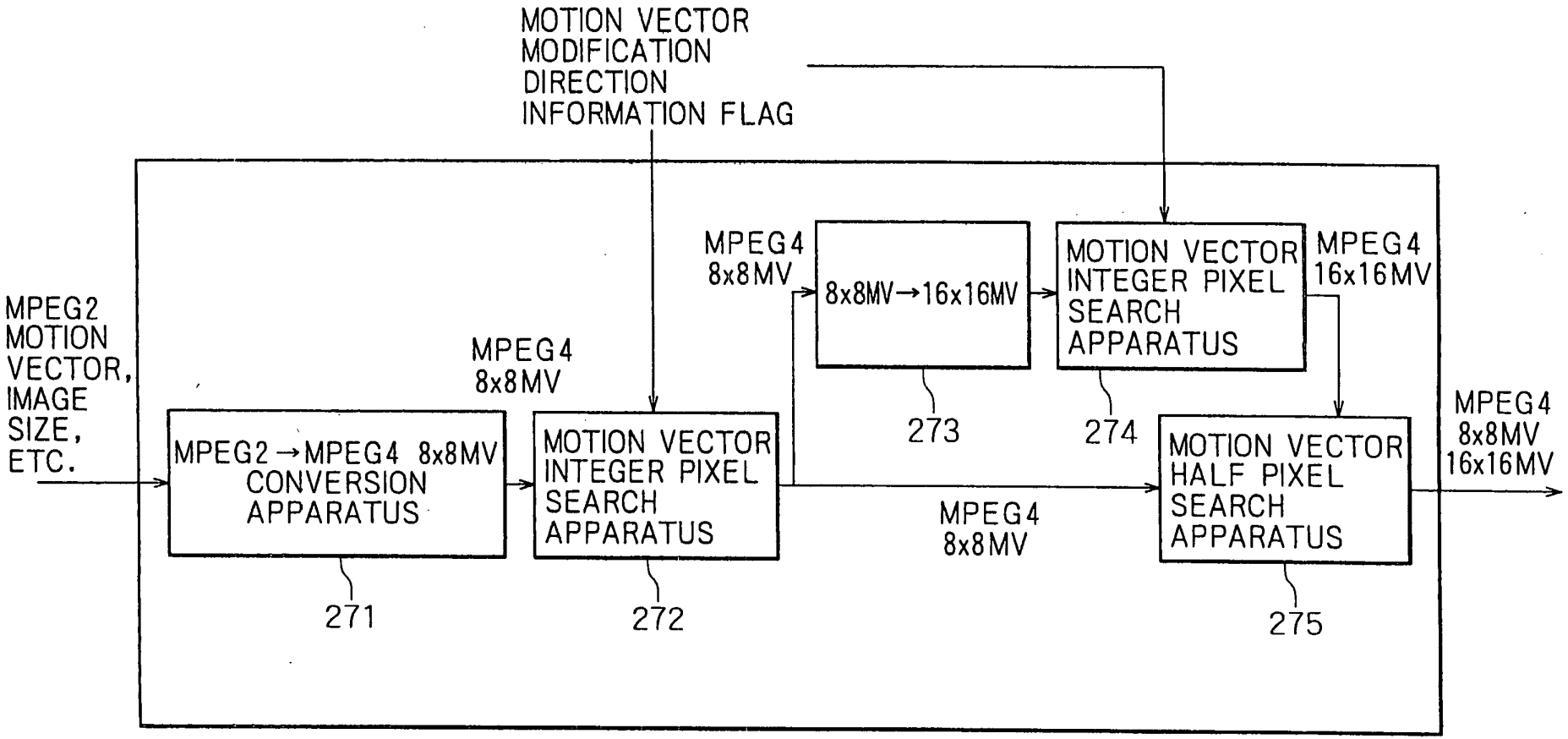


FIG. 33 PRIOR ART



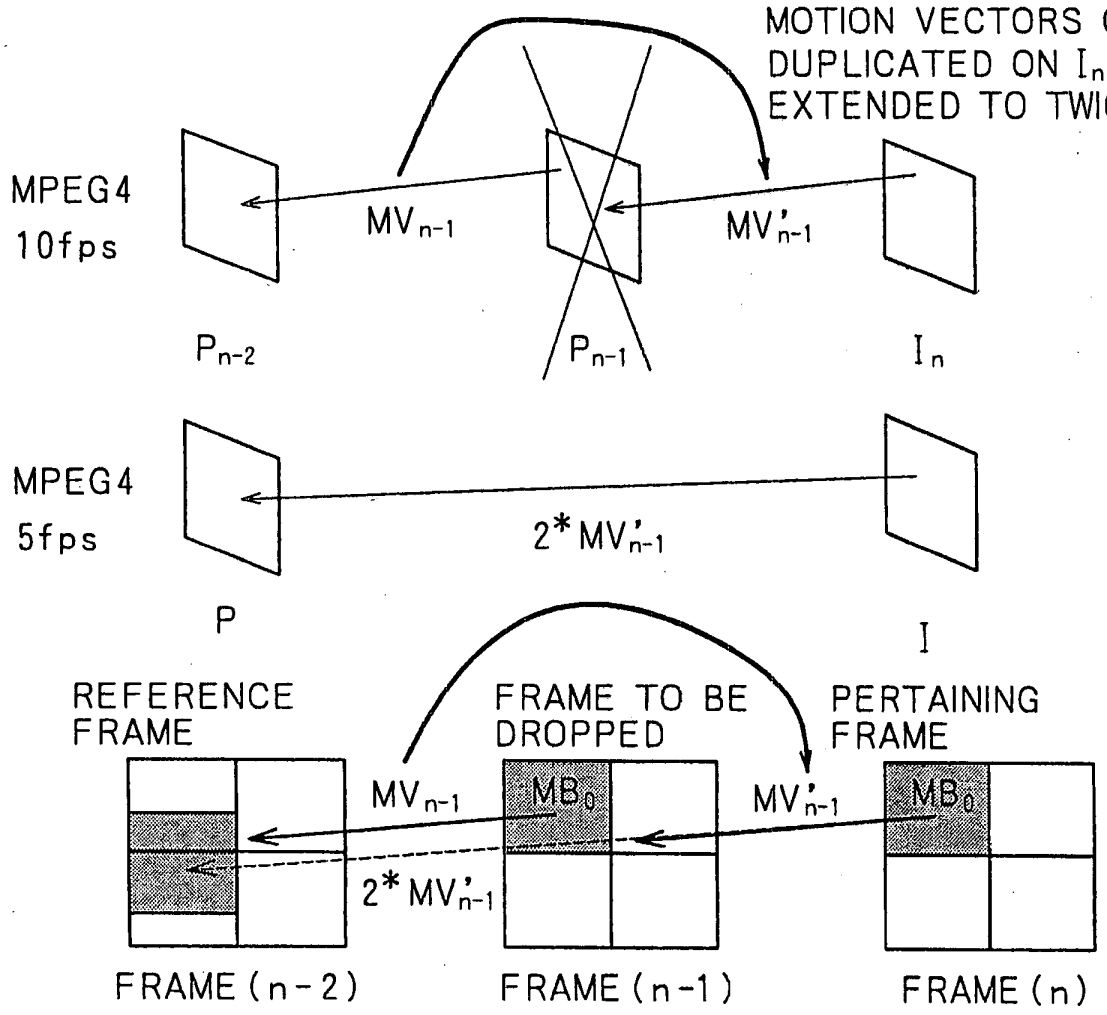
MOTION VECTOR CONVERSION APPARATUS

FIG. 34 PRIOR ART



MOTION VECTOR CONVERSION APPARATUS

FIG. 35



MV_{n-1} IS DUPLICATED AND EXTENDED TO TWICE FOR TEMPORAL MODIFICATION

FIG. 36

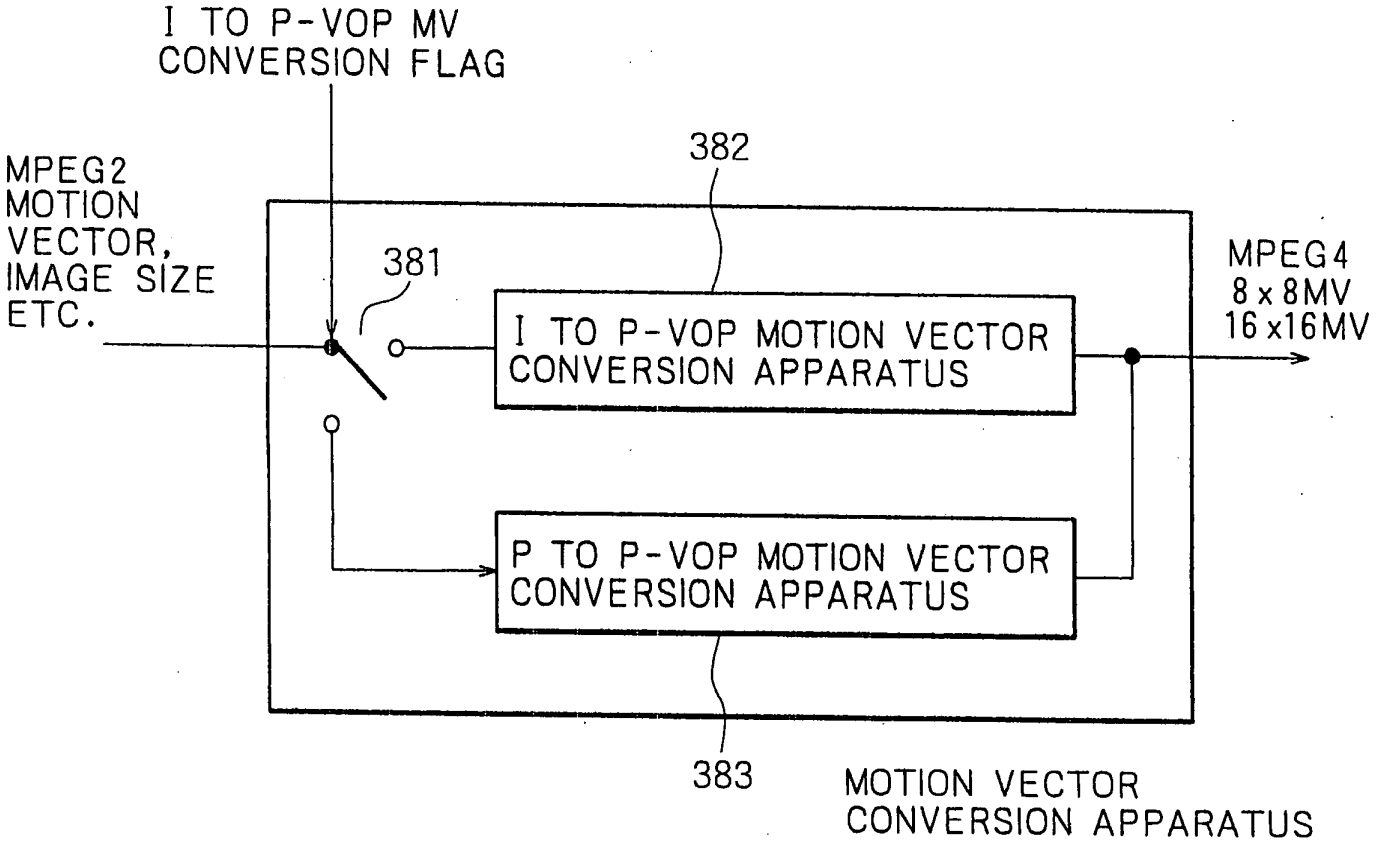
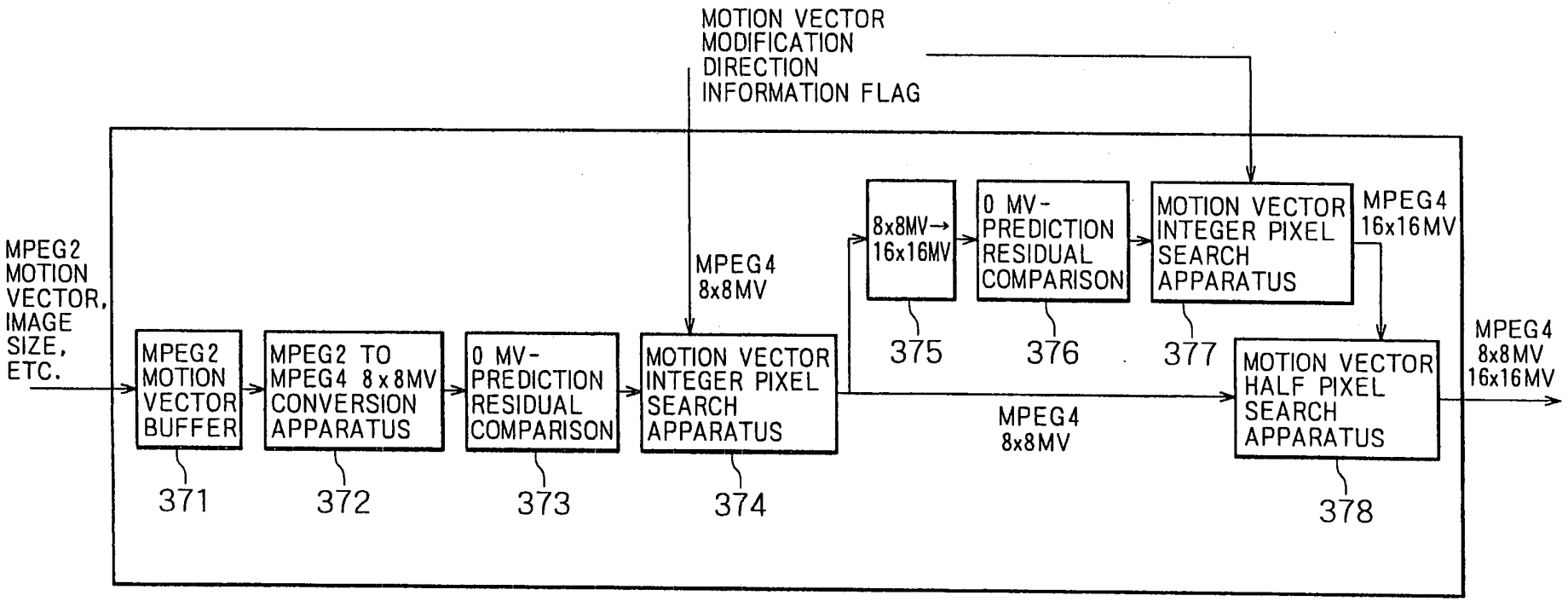

I TO P-VOP MV
CONVERSION FLAG
MPEG2
MOTION
VECTOR,
IMAGE SIZE
ETC.
382
381
I TO P-VOP MOTION VECTOR
CONVERSION APPARATUS
P TO P-VOP MOTION VECTOR
CONVERSION APPARATUS
MPEG4
8 x 8MV
16 x16MV
383
MOTION VECTOR
CONVERSION APPARATUS

FIG. 37



I TO P MOTION VECTOR CONVERSION APPARATUS